S. HRG. 101-365

THE FUTURE OF U.S.-SOVIET RELATIONS

HEARINGS

BEFORE THE

COMMITTEE ON FOREIGN RELATIONS
UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

APRIL 4, 12, 19 and MAY 3, 15, 18 and JUNE 1 and 20, 1989

Printed for the use of the Committee on Foreign Relations

U.S. GOVERNMENT PRINTING OFFICE

98-461 WASHINGTON : 1990

5381-1

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

98-461

COMMITTEE ON FOREIGN RELATIONS

CLAIBORNE PELL, Rhode Island, *Chairman*

JOSEPH R. BIDEN, JR., Delaware
PAUL S. SARBANES, Maryland
ALAN CRANSTON, California
CHRISTOPHER J. DODD, Connecticut
JOHN F. KERRY, Massachusetts
PAUL SIMON, Illinois
TERRY SANFORD, North Carolina
DANIEL P. MOYNIHAN, New York
CHARLES S. ROBB, Virginia

JESSE HELMS, North Carolina
RICHARD G. LUGAR, Indiana
NANCY L. KASSEBAUM, Kansas
RUDY BOSCHWITZ, Minnesota
LARRY PRESSLER, South Dakota
FRANK H. MURKOWSKI, Alaska
MITCH McCONNELL, Kentucky
GORDON J. HUMPHREY, New Hampshire
CONNIE MACK, Florida

GERYLD B. CHRISTIANSON, *Staff Director*
JAMES P. LUCIER, *Minority Staff Director*

CONTENTS

Page

APRIL 4, 1989

Kennan, George F., Professor Emeritus, The Institute for Advanced Study, Princeton University 3
Prepared statement 12

APRIL 12, 1989

Connor, Walker, The John R. Reitemayer Professor of Political Science, Trinity College, Hartford, CT 128
Prepared statement 131
Dunlop, John B., Senior Fellow, Hoover Institution on War, Revolution and Peace, Stanford, CA 158
Prepared statement 161
Horowitz, Donald, Duke University 107
Prepared statement 111
Legvold, Robert H., Director, The W. Averell Harriman Institute for Advanced Study of the Soviet Union, Columbia University, New York, NY 39
Prepared statement 42
Lubin, Nancy, Carnegie-Mellon University, Pittsburgh, PA 142
Prepared statement 146
Ra'anan, Uri, Director, Institute for the Study of Conflict Ideology and Policy, Boston, MA 58
Prepared statement 61
Simes, Dimitri K., Director, U.S.-Soviet Program, Carnegie Endowment for International Peace 71
Staar, S. Frederick, President, Oberlin College, Oberlin, OH 74
Prepared statement 76

APRIL 19, 1989

Horelick, Arnold L., Director, Rand/UCLA Center for the Study of Soviet International Behavior 193
Prepared statement 197
Jordan, David C., Former Ambassador to Peru 199
Prepared statement 203
Mandelbaum, Michael, Director, Project on East-West Relations, and Senior Fellow, Council on Foreign Relations, New York, NY 220
Prepared statement 224
Staar, Richard F., Coordinator, International Studies Program, Hoover Institution 232
Prepared statement 235

MAY 3, 1989

Brady, Larry, Former Assistant Secretary of Commerce for Trade Administration, Senior Vice President, Hill and Knowlton, Washington, DC 402
Prepared statement 405
Hewett, Edward A., Senior Fellow, The Brooking Institution 312
Prepared statement 315
Hough, Jerry, Director, Center on East-West Trade, Investment, and Communications, Duke University, Durham, NC 316
Kiser, John W., III, President, Kiser Research, Inc., Washington, DC 439
Prepared statement 442

Page

Robinson, Roger W. Jr., Former Senior Director for International Economic Affairs, National Security Council, Washington, DC 319
Prepared statement 322
Shelton, Judy, Research Fellow, Hoover Institution, Stanford University, Palo Alto, CA 333
Prepared statement 336
Prepared statement of Mr. Parker 342
Sherr, Alan B., Director, Project on Soviet Foreign Economic Policy and International Security, Center for Foreign Policy Development, Brown University, Providence, RI 421
Prepared statement 425

MAY 15, 1989

Blechman, Barry, President, Defense Forecasts, Inc., Washington, DC 612
Codevilla, Angelo M., Senior Research Fellow, Hoover Institution, Stanford University, Stanford, CA 632
Prepared statement 638
McNamara, Robert S., Former Secretary of Defense 565
Prepared statement 572
Rosefielde, Steven, Professor of Economics, University of North Carolina, Chapel Hill, NC 648
Prepared statement 654
Warner, Edward L., III, Senior Defense Analyst, Rand Corp., Washington, DC. 594
Prepared statement 600

MAY 18, 1989

Dean, Jonathan, Former U.S. Representative, Arms Control Advisor, Union of Concerned Scientists, Washington, DC 756
Prepared statement of Union of Concerned Scientists 760
Gaffney, Frank, Director, The Center for Security Policy, Washington, DC 824
Prepared statement 829
Kampelman, Max M., Former Head of Delegation and Defense and Space Negotiator 732
Prepared statement 736
MccGwire, Michael K., Senior Fellow in Foreign Policy, Brookings Institution, Washington, DC 860
Nitze, Paul N., Former Ambassador At Large and Special Advisor on Arms Control Matters 725
Prepared statement 730
Steinbruner, John D., Director, Foreign Policy Studies Program, Brookings Institution, Washington, DC 865
Prepared statement 870

JUNE 1, 1989

Kirkpatrick Jeane J., Former U.S. Ambassador to the United Nations, and Senior Fellow, American Enterprise Institute 892

JUNE 20, 1989

Baker, James A., III, Secretary of State 908
Prepared statement 914

APPENDIX

Forum on U.S.-Soviet Trade Relations 545
Responses by Mr. Lambertson to Questions asked by Senator Cranston 947
Joint Letter from Foreign Relations Committee Senators 948
Article—START: .....

HEARING #1
OVERVIEW

TUESDAY, APRIL 4, 1989

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met, pursuant to notice, at 10:02 a.m., in room SD–419, Dirksen Senate Office Building, Hon. Claiborne Pell (chairman of the committee) presiding.

Present: Senators Pell, Biden, Sarbanes, Cranston, Simon, Sanford, Moynihan, Robb, Helms, Lugar, Kassebaum, Murkowski, and Mack.

The CHAIRMAN. The Committee on Foreign Relations will come to order.

Today we begin a series of hearings on that aspect of American foreign policy which transcends all others: The Future of United States-Soviet Relations.

Following today's initial hearing with Ambassador Kennan, the committee will proceed by taking testimony from several panels of experts.

In the first of these, to be held April 12, entitled, "The Gorbachev Era in Perspective: The End of Ideology?" the committee will examine current developments within the Soviet Union, focusing on the significance of and prospects for General Secretary Gorbachev's program of political and economic reform.

The second panel, on April 20, will be on the subject of "Soviet Foreign Policy," and the committee will review the changes underway in the conduct of Soviet policy in Eastern Europe, the Far East, South Asia, the Middle East, et cetera, and toward the United States and its allies, examining the opportunities and challenges that this newly dynamic Soviet behavior may hold.

The third panel, on "Soviet Defense and Arms Control Policy," will focus on developments in Soviet military doctrine, on the implications thereof for Western defense planning, and the possibilities for continued and possibly, hopefully, far-reaching programs in nuclear and conventional arms control.

The fourth panel, on "East-West Economic Relations," will examine the weaknesses and potentialities of the Soviet economy, and the options available to the West in interacting constructively with the Soviet Union.

Finally, on a date next month, our committee plans to complete these hearings with testimony from Secretary Baker, who, by then, may be able to describe some of the conclusions reached by the

Bush administration in the course of conducting what has become known as its "strategic review."

Today, as the hearings begin, we are very fortunate to have as our leadoff witness a distinguished American diplomat, whose experiences as a witness to history and often as a central participant span the world's events of the past 60 years.

I remember myself, as a young Foreign Service officer, the secretary of a legation, reading Mr. Kennan's excellent article in Foreign Affairs and being very struck by it, and then following in his footsteps, being stationed as the secretary of a legation and Vice Consul in Czechoslovakia, and being there not when the Germans took over, as when he was there, but being there when the Communists took over a few years later.

Ambassador Kennan began his Foreign Service career in 1926, and served as an FSO for 26 years. He was a member of the first American delegation to the Soviet Union in 1933 and was in Russia during Stalin's purges. He served in Berlin when Hitler declared war on the United States, and was back in Moscow at the close of World War II, where he conceptualized the policy of "containment." It was "containment" that was to govern American foreign policy throughout the long postwar period.

Later, as head of the State Department's Policy Planning Staff, under Secretary Marshall, he played a major role in shaping one of the great successes in the history of international affairs, the Marshall plan, which helped to resurrect a war-torn Europe from economic frustration and political vulnerability.

Still, in the Truman administration, Mr. Kennan became Ambassador to Moscow, and, a decade later, served under President Kennedy as the American Ambassador to Yugoslavia.

Today, with a newly installed administration, the United States must shape a sound policy to deal with the Soviet Union. I cannot imagine a better informed, more deep or profound teacher of that policy that Ambassador Kennan.

I would ask the ranking minority member if he has some opening remarks.

Senator HELMS. Thank you, Mr. Chairman.

As we begin these hearings, there is a great deal of hope in the air, an atmosphere of confidence that the direction of the Soviet Union is changing.

This has been said time and time again. But, right now, there is a belief, almost a faith, that the spots are changing on the Marxist-Leninist dictatorship, and that it will shortly become a purring, social democratic pussycat.

Well, we can hope.

While these hopes are to be cherished, we must, nevertheless, be prepared to face the reality that confronts us. That reality is the poverty and social dislocation, which is easily documented in the Soviet Union.

But it is true only as regards the civilian economy. The military economy is alive and well.

If there are any benefits from the fine tuning of the Soviet system, we can be sure that the Soviet military sector will get those benefits first.

Now, the Soviet leadership has presented no detailed blueprint for the theoretical transformation of a centrally planned command economy into a market-oriented, decentralized model.

Indeed, there is no assurance that they even want to do that. The Soviet Union's official budget figures claim only 20 billion rubles in their defense budget. But, the most recent NATO estimate is 110 to 120 billion rubles, or 100 billion more than the Soviets say.

Some cautious estimates place Soviet military spending at 19 percent of GNP, as compared with 6.5 percent for the United States.

This is why in the past decade the Soviets have completely modernized their strategic forces. In the past year alone, they have doubled the number of SS–25 road mobile ICBM's; they have deployed more than 50 of the 10 MIRVed SS–24 rail mobile ICBM's; and about 50 of the so-called SS–18 follow-on, which is a giant missile with 14 MIRV's.

Now, then, most experts consider this missile to be so heavy and so powerful as to be an entirely new type and not a follow-on, as the Soviets claim. This is the Soviet test missile that used Hawaii for target practice just a year and a half ago.

Meanwhile, the Soviets have also deployed the DELTA IV class submarine and the TYPHOON submarine with an array of new submarine-launched missiles. And in the same period, they have deployed a huge force of TU–95 BEAR bombers, and the BLACKJACK bombers and the BACKFIRE bombers with an array of new air-launched cruise missiles.

So, it is not surprising that the machinebuilding and metalworking sector of the Soviet economy is targeted to increase 80 percent in the current 5-year plan.

We may think that the Soviet 5-year plans are a joke. But the Soviets do not fool around when it comes to the sector that means most to them, and that is the backbone of their military economy.

I have further comments, Mr. Chairman, but in the interest of time, I am going to ask that they be made a part of the record.

The CHAIRMAN. Without objection, that will be done.

[The prepared statement of Senator Helms was not available at the time of printing.]

The CHAIRMAN. Now we will be very glad indeed to hear from you, Ambassador Kennan.

STATEMENT OF HON. GEORGE F. KENNAN, PROFESSOR EMERITUS, THE INSTITUTE FOR ADVANCED STUDY, PRINCETON UNIVERSITY

Ambassador KENNAN. Well, in much of what Senator Helms has said I think there is a great deal of truth, especially in what he said first about the general economy of the Soviet Union.

I would not agree entirely. I have a different impression of some of the details of his statement, and I simply cannot comment on the data that he has given us about the buildup of the Soviet strategic nuclear forces. I am not enough of an expert on that to comment on those data that he brought forward.

I do think, however, that the burden of armaments on the Soviet economy and on the whole Soviet political system, which Senator

Helms mentioned, is a very great one, and that Gorbachev has good reason to want to see it reduced.

I believe that if the negotiations for the 50-percent reduction of the strategic forces go forward successfully, that will take care of much of what has concerned not only Senator Helms, but many other people in this country.

Thank you.

The CHAIRMAN. And now I believe you have a prepared statement for us.

Ambassador KENNAN. Would you like me to read the statement?

The CHAIRMAN. We would, I think.

Ambassador KENNAN. Thank you.

The following comments are addressed to the question of the future of Soviet-American relations.

What we are witnessing today in Russia is the breakup of much, if not all, of the system of power by which that country has been held together and governed since 1917.

Fortunately, that breakup has been most pronounced in precisely those aspects of Soviet power that have been most troublesome from the standpoint of Soviet-American relations, namely:

The world-revolutionary ideology, rhetoric, and political efforts of the early Soviet leadership. By that, I meant the leadership that existed, let us say, in the first 10 or 15 years of Soviet power. Fortunately, these elements are no longer a significant factor in Soviet behavior. Second is the morbid extremism of Stalinist political oppression. I don't know how else to describe it. Anything that you say about it is an understatement. This factor began to be greatly moderated soon after Stalin's death in 1953. Further, very extensive modifications of it have been proceeding under Gorbachev, and the remnants of it are now being dismantled at a pace that renders it no longer a serious impediment to a normal Soviet-American relationship.

There do remain, however, three factors that trouble the relationship and that have to be considered when one confronts the questions of its future. These are:

What many in the West consider to be the inordinate size of the peacetime conventional armed force establishment of the Soviet Union;

Second is what remains of the Soviet political and military hegemony in Eastern and parts of Central Europe;

Third is the rivalry between the two powers; that is, ourselves and the Soviet Union, in the cultivation and development of nuclear and conventional weaponry;

And, finally, to these factors, as ones presenting problems in the Soviet-American relations, might be added the unstable and, in some respects, dangerous internal-political situation that now prevails in the Soviet Union.

I would like to comment briefly on each of those factors.

The maintenance of what appear to be numerically excessive ground forces in peacetime has been a constant feature of Russian-Soviet policy for most of the last 200 years. The reasons for this, which I won't go into now, have been partly domestic and partly defensive. It is significant that never, in all this time, have these great forces been employed to initiate hostilities against a major

military power. Under Gorbachev's leadership, the size of that establishment is now being somewhat reduced. Altogether, this should not be a serious complication of the Soviet-American relationship.

As for the Soviet hegemony in Eastern Europe: since roughly the time of the increased troop movements into Czechoslovakia in 1958, the Soviet political hegemony over the other Warsaw Pact countries has been slackening; and now, since Gorbachev's advent to power, there has been a marked advance in the effective independence of these satellite governments.

In the shaping of their economies and of their relations with the Western countries, those regimes now have essentially a free hand, provided only, first, that they do not challenge their obligations of membership in the Warsaw Pact; and, second, that they do not depart from the use of the term "socialist" as the official designation of their economies.

But, of course, a great deal can happen under that particular umbrella.

So tenuous is today the Soviet hold over these countries that I personally doubt that military intervention into any of them along the lines of the action in Hungary in 1956 would now be a realistic option of Soviet policy. Not only would it be in crass conflict with Gorbachev's public commitments, but the consequences in the remainder of the satellite area and among the non-Russian nationalities of the Soviet Union would be unpredictable.

Now, as for the third point; that is, the rivalry in the cultivation of nuclear and conventional weaponry, I do not consider that our Government has made the efforts it could and should have made in recent years to reach acceptable agreements with the Soviet side for the reduction of either nuclear or conventional weapons.

While this question is too complex for detailed treatment in this statement, I would like to offer these general comments.

There have been in recent months and years several interesting and encouraging initiatives and suggestions from the Soviet side to which we have been essentially unresponsive. Obviously, these initiatives and suggestions could not be taken at face value. They all called for explorations, in discussions with the Soviet side, of their reality and practical significance. But this exploration has not been seriously undertaken. I think it should have been.

The problems of reductions in conventional armaments has been needlessly complicated and distorted, in my opinion, by the egregious exaggeration of the existing Soviet superiority in such weapons, an exaggeration that has marked the public statements and, apparently, the official assumptions of our Government.

This, obviously, should be corrected.

The arsenals of nuclear weapons now in the possession of the Soviet Union and the United States are plainly vastly redundant in relation to the purpose they are supposed to serve. Owing to their overdestructiveness and their suicidal implications, these weapons are essentially useless from the standpoint of actual commitment to military combat; and, whatever "deterrent" function they might usefully serve could be effectively served by far smaller forces.

The statements and policies of our Government appear to reflect an assumption that the maintenance of these excessive arsenals

presents no serious problem, and that there is no urgency about the need for their reduction.

I cannot share this complacency.

Not only is there the danger that these weapons might come into use by accident, misunderstanding, or other inadvertence, but there seems to be a real and immediate danger that there will be further proliferation in the immediate future.

This danger calls urgently for a vigorous attack on the whole problem of proliferation; and a prerequisite for such an attack would be, as I see it, extensive reductions in the holdings of the two superpowers.

It is unrealistic to suppose that the United States and the Soviet Union can continue indefinitely to cultivate these weapons in such excessive numbers and yet successfully to deny to most of the world's governments the right to cultivate them at all.

Finally, the domestic-political-personal situation of Mr. Gorbachev is, indeed, in certain respects precarious, particularly in view of the meager results to date of his program or perestroika.

But his position also has had important elements of strength, as does his program; and both have now been strengthened by the results of the recent election. His initiatives in foreign policy have not met with serious internal political resistance. There is, therefore, no reason to suppose that agreements entered into with his government under his leadership would not, if properly negotiated and formalized, be respected by his successors.

In summary, it appears to me that whatever reasons there may once have been for regarding the Soviet Union primarily as a possible, if not probable, military opponent, the time for that sort of thing has clearly passed. That country should now be regarded essentially as another great power like other great powers—one, that is, whose aspirations and policies are conditioned outstandingly by its own geographic situation, history, and tradition, and are, therefore, not identical with our own, but are also not so seriously in conflict with ours as to justify any assumption that the outstanding differences could not be adjusted by the normal means of compromise and accommodation.

It ought now to be our purpose, I consider, while not neglecting the needs of our general security, to eliminate, as soon as possible, by amicable negotiation, the elements of abnormal military tension that have recently dominated Soviet-American relations, and to turn our attention, instead, to the development of the positive possibilities of this relationship, which are far from insignificant.

Thank you.

The CHAIRMAN. Thank you very much, Ambassador Kennan, for your statement.

It is particularly interesting to us in your capacity as the author of the original rather strong and tough "containment" policy, which we followed for so many years.

As you can see, there is great interest here in your statement, and we will be under the 10-minute rule, where each of us will have 10 minutes to ask you questions and for your replies.

I have just one opening question and it is this.

About 8 years ago, we called for a 50-percent reduction in the nuclear arsenals of the superpowers, a proposal which, at that time

was scoffed at by many, but which a few years later the two sides formally adopted as their stated goal in the START talks.

Then, more recently, in a New York Times magazine article, you wrote that the U.S. hesitant and unenthusiastic responses to many of Gorbachev's foreign policy initiatives have caused many people elsewhere in the world to wonder whether we really have any serious interest in arms control at all.

I must say I share that same thought.

It seems to me that the Soviets have taken more unilateral actions of this sort than we have in the past few years.

I would be very grateful if you could elaborate your concern on this. Do you think it is necessary for us to have a response each time Gorbachev makes a proposal, or do you think more in broader terms?

Ambassador KENNAN. We should certainly not think it incumbent on us to respond positively immediately to every one of these initiatives. They, as I said in my statement, each of them, ought to be explored in discussions with our Soviet counterparts to find out exactly what they have in mind and to measure that against our own requirements and our own interests.

But I do think that those explorations should be undertaken. We should not allow these initiatives from the Soviet side, when they are of an encouraging nature, to go unrecognized by us. Even where they seem, sometimes, to be extreme, or to be ones to which we could not respond without putting up a number of conditions, I think we should still insist on communicating with them about such matters.

The CHAIRMAN. For example, do you think we ought to respond specifically to the Soviet offer to withdraw, to reduce their conventional forces in Europe by 500,000 people?

Ambassador KENNAN. Yes.

But, of course, again, this is not by accepting that in a blanket way, right at the beginning.

I think we should take cognizance of the various stages which Gorbachev has suggested as a way of approaching this and should examine each of them, and should see whether there is anything we can do to promote agreement on those stages and what it is. But, by all means, remain in contact with them, informally if not formally, throughout the entire process.

I think that Mr. Gorbachev's aim of the reduction of the confrontation in the center of Europe by a million men is a very understandable and a very worthy one, and it is high time that we should see what could be done to achieve it.

The CHAIRMAN. You and I have both lived under communism, behind the Curtain. I think all of us who have lived behind the Curtain are struck by the incompetence, inefficiency, and antinatural tendencies, or antinatural effects of a Communist regime, in that communism contains the seeds of its own destruction within itself. It is not capitalism that does.

I am just curious if you felt that this movement now in the Soviet Union is pretty irreversible, or do you feel that another Stalin could come down the pike a little later on?

What is your view?

Ambassador KENNAN. The last few words, Senator, of your question I could not hear.

The CHAIRMAN. Do you think that progress is being made? The perestroika that Gorbachev is shooting for, do you think that is an irreversible trend, or can it be changed again and go backward, as has happened once under the tsars?

Ambassador KENNAN. I think that it is in this sense irreversible, that it would be quite impossible today to return even to the conditions of the period of Mr. Brezhnev, and even more impossible to return to the conditions under Mr. Stalin.

Of course, this is a highly confused and flexible situation that prevails in that country today, and I have no doubt that some of the things that Mr. Gorbachev has been trying to achieve will probably not be achieved in his time. And there may be reverses.

But, by and large, he has set into motion a process which had to be set in motion sooner or later. It should have come much earlier.

I think it is a very important process. I think it may correctly be described as the removal of the last vestiges of Stalinism, but also as really the end of the Russian revolution, as we have known it and thought of it for the last 70 years.

I think a new Russia is going to emerge from all of this confusion, which will not much resemble the Communist one that we have known all these seven decades. Some of that may last. Perhaps there are small features of it which deserve to last. I cannot say that. But, by and large, this whole great structure of power, which was, I think, founded on erroneous ideological principles, has now worn itself out; and Russia is going to have to find for itself something new, something better.

Gorbachev has set that process in motion. It was a very dangerous thing to do. In doing this, he has unleashed tremendous forces, perhaps greater than he himself realized in Russian society, and in the society of the Soviet Union as a great multinational empire. It is very difficult to predict what is now going to happen.

But, by and large, I view this as a very positive undertaking that he has gone into, one that required great courage, I must say, and great strength of character on his part.

Like all the rest of us, I think he will not achieve everything that he has tried to achieve; but that the residue of all his efforts, whatever it is, will be one that benefits us and benefits the world.

The CHAIRMAN. Were you as struck as I was in his book "Perestroika" how he leapfrogged backward and omitted practically all references to Stalinism and Stalin's days, going back to the NEP, the new economic policy of Lenin?

It would seem to me that what he is doing here is still being a socialist, but going back to the NEP, and that we're going to get lessons on Lenin in the future.

What would be your thought there?

Ambassador KENNAN. Well, I suppose he felt he had to do this.

Mr. Gorbachev had no way to do what he was trying to do except through the existing apparatus of power that he had before him, when he entered into this position several years ago.

I think he tried to fall back on Lenin as a positive force, as he saw it, in Russian affairs.

I personally would not agree with that. I think there was a great deal that was wrong with Lenin's ideology and with his methods, too. I think that Mr. Gorbachev has discovered, particularly in connection with the problems of Russian agriculture, that, in trying to do what he is trying to do, he has to combat not only all the mistakes of the Communist period but many of the faults of Russian agriculture way back into the tsarist period.

In other words, he has nothing to build on out of either the tsarist tradition or the Communist tradition, and he is going to be forced to innovate here and to create something which is entirely identical with neither of these models.

The CHAIRMAN. When you compare his regime with Castro's regime, you see a certain difference, because Castro built his Communist state on a rural proletariat, which gave him the fertile soil for communism; whereas, in the Soviet Union, you had the kulak class, the bourgeois class, which had to be eliminated first.

What do you see coming out of the present discussions between Gorbachev and Castro on Cuba?

Ambassador KENNAN. I think they must be rather painful discussions behind the scenes. I do think that they will probably be useful. They are a stage, that had to be passed, in the winding up—which I hope will come—of the Soviet Government's abnormal interest and involvements in Central America.

I think that Gorbachev must want to see those burdens modified, if not eliminated.

As you know, Cuba has been a stone around the Soviet neck financially for a long time, and that cannot be welcome in Moscow in the period which we are now living through.

The CHAIRMAN. Thank you very much, indeed.

Senator Helms.

Senator HELMS. Thank you, Mr. Chairman.

Mr. Ambassador, I have to commend you on your stamina. It's good to see you here this morning.

Ambassador KENNAN. Thank you, sir.

Senator HELMS. We will not discuss how old I am or you are. But I have been reading about you and following you for years and years. It is good to see you and I thank you for coming.

Ambassador KENNAN. Thank you. I appreciate that.

Senator HELMS. I guess what we are saying in one way or another, all of us, is that it is going to depend on how much of a taste of freedom the Russian people get: How much freedom of speech, freedom to assemble, freedom to select their leaders, and so forth.

It may be—and this is my heart talking instead of my head, maybe—it may be that for those who would continue to oppress the Russian people, they have opened a Pandora's box. I hope they have. I hope the tidal wave will continue. In that case, there is hope.

But also at the same time I think there is a reason to engage in a healthy skepticism and to watch it, and to be sure that we are not giving away the store and not making a mistake.

I say this because from the beginning of the Soviet regime, there has been a hope in the West that commercial relations, for example, would somehow be an inducement for restrained behavior on the part of the Kremlin. Time and time again, I have seen various

commercial deals conducted, and the result, up to now, has been the same.

I was looking the other night, and I think it was in 1922 that there was an international conference at Genoa by the European powers as well as the United States, a conference to discuss commercial relations with a Soviet delegation.

Now, I was pretty young at that time, like 1 year old. So, I don't remember it.

But what I read was that European and American banking and industrial interests fell all over themselves to develop lucrative trade relations with the Soviets. For the past seven decades, in one way or another, European and American businessmen have been trading with the Soviets.

Now, laying aside our hopes and aspirations for the future, do you believe that the historical record demonstrates that commercial relations somehow mellow Soviet behavior?

Ambassador KENNAN. No, not in any very significant degree. I think that trade may be a minor involvement with other countries that has to take its place in the considerations that the Soviets leaders entertain when they think about foreign policy problems. But, particularly with respect to our own country, I think this has been a minor factor.

I consider, to be sure, that there are other reasons, perhaps, why "normal trade" should be permitted to go forward insofar as American businessmen want to conduct it and find it profitable to conduct it. But I don't think we should place any inordinate political hopes on the effects of trade on the major political problems.

In this, I can only answer your question, really, in the manner in which I think you were placing it. I don't think it is a major factor.

Senator HELMS. But at the same time, I think we have to acknowledge and consider that it is self-evident that these commercial relations with the Soviet Union have, in the past, and we hope not in the future, served to build this war machine that the Kremlin has put together, and that has been used, in turn, of course, for Soviet global expansion and influence.

In any case, in 1922, there was another important conference, and that was at Rappallo, Italy. At this conference, the two pariah states of Europe, Germany and the Soviet Union, agreed to establish diplomatic relations and commercial cooperation, and the German bankers and industrialists saw Soviet Russia as a vast economic space for commercial exploitation.

The German military saw an opportunity for using Soviet Russia as a part of a secret plan to redevelop German military power.

Now, the reason I ask that question and go into it is what is your assessment of the West German intentions today with respect to the Soviet Union?

Ambassador KENNAN. I think the leading consideration in the minds of the West German authorities today, when they think about Soviet American relations, would be their great desire to see a diminution of the military confrontation in the center of Europe, because Germany bears the main burden of that confrontation.

They have the forces, I believe, of six or seven different countries on their soil, and this is burdensome to them, and annoying in a great many ways.

So, the first thing I think they would like to do is to see the whole intensity of the military standoff in the middle of Europe diminished.

They would also, of course, like to develop their economic ties with the Soviet Union. They have always, in the last century, had much more extensive business dealings with Russia than we have. They have sometimes been profitable, sometimes I suppose not. But this is a natural field for the German economy. They are close to it. They have a long tradition of interest in the Soviet economy.

They see a great country there, highly underdeveloped, which has, really, great need of all that Germany, as the leading European industrial country, might have to offer, and they would like to make as good use of that situation as they can.

They are aware of the limitations, too, on such a policy. But they go into it, as they always have, much more enthusiastically than we have.

I don't think they have any dreams of associating themselves again, politically or militarily, with the Soviet Union in any manner that could be a threat to the West.

I really have spent many years of my life in Germany, before Hitler and, again, during the Hitler time. I see a good deal of that country now, in this post-Hitlerian period. I really think that that aspect of German policy which worried many people in the West so much in earlier decades has now really just about disappeared.

I would have no anxieties about that. I think they know perfectly well where their greatest interests lie, that they lie toward the West, and toward the continuation of close relationships of confidence and intimacy with the Western community.

I do not think there are any significant dreams among them, either of adopting a neutralized position and mediating between the two sides, or of associating themselves in any way politically and militarily with the Soviet Union. I am happy to say this. But I say this in the light of the experience of four decades now that we have had with the West German Government.

I think it has been quite remarkable how successful a moderate democratic system Western Germany has been able to develop over these years. It has been headed by absolutely excellent men. We could not have asked for better ones. The succession of German presidents in Western Germany has been really a succession of a number of very fine men.

I think they should be given credit for this and for their loyalty to NATO, which has not always been easy for them, and that we should give them at least our general confidence.

We may not agree with them about every aspect of their policy, but we need have no inordinate anxieties on that score.

Senator HELMS. Well, I suspect that that will be of some comfort to the other members of NATO because I have talked with some of them, and they are living on a diet of fingernails about this possibility.

Ambassador KENNAN. Yes.

Senator HELMS. They are nervous because they see that the West Germans are looking for expanded influence in Eastern Europe and the Soviet Union at the expense of NATO.

You don't think they have any need to worry about that?

Ambassador KENNAN. Not at the expense of NATO.

I think this is being thrust upon them to some extent because the Soviet satellite countries, certain of them, are now in a position to expand their relationships with the West, and they tend to look in the first instance to Germany for a response to that.

But I think the best way out of that lies through the European Community. I have always thought that the best future of Germany, from our standpoint, from the standpoint of world peace, was a very close association of Germany with a general European Community of countries.

I would have liked to have seen Germany a part of a real European federation. I would not trust the future if it were a question of setting up Germany again as the greatest single military and political power in Europe without any bonds to anybody else. I think that would be unhealthy. It would cause great anxieties among the others. It would present temptations perhaps for the Germans which would be undesirable.

Senator HELMS. You have stated precisely the concerns of some NATO people. It is going to be interesting to see how it goes and whether the Soviets play the German card and vice versa.

Thank you very much.

[The prepared statement of Mr. Kennan follows:]

PREPARED STATEMENT OF MR. GEORGE F. KENNAN

The following comments are addressed to the question of the future of Soviet-American relations.

What we are witnessing today in Russia is the breakup of much, if not all, of the system of power by which that country has been held together and governed since 1917.

Fortunately, that breakup has been most pronounced in precisely those aspects of Soviet power that have been most troublesome from the standpoint of Soviet-American relations; namely:

(a) The world revolutionary ideology, rhetoric, and political efforts of the early Soviet leadership. (Fortunately, these are no longer a significant factor in Soviet behavior.)

(b) The morbid extremism of Stalinist political oppression. (This factor began to be greatly moderated soon after Stalin's death in 1953. Further very extensive modifications of it have been proceeding under Gorbachev; the remnants of it are now being dismantled at a pace that renders it no longer a serious impediment to a normal Soviet-American relationship.)

There remain, however, three factors that do indeed trouble the relationship and have to be considered when one confronts the questions of its future. These are:

(a) What many in the West consider to be the inordinate size of the peacetime conventional armed force establishment;

(b) What remains of the Soviet political and military hegemony in Eastern, and parts of Central, Europe;

(c) The rivalry between the two powers in the cultivation and development of nuclear and conventional weaponry; and

(d) To these factors, as ones presenting problems in Soviet-American relations, might be added the unstable and in some respects dangerous internal political situation that now prevails in the Soviet Union.

I would like to comment, briefly, on each of these factors.

(a) The maintenance of what appear to be numerically excessive ground forces in peacetime has been a constant feature of Russian/Soviet policy for most of the last 200 years. The reasons have been partly domestic and partly defensive. It is significant that never, in all this time, have these forces been employed to initiate hostilities against a major military power. Under Gorbachev's leadership, the size of the establishment is now being somewhat reduced. Altogether, this should not be a serious complication of the Soviet-American relationship.

(b) Since roughly the time of the increased troop movements into Czechoslovakia in 1968 the Soviet political hegemony over the other Warsaw Pact countries has

been slackening; and now, since Gorbachev's advent to power, there has been a marked advance in the effective independence of these satellite governments. In the shaping of their economies and of their relations with Western countries, those regimes now have essentially a free hand, provided only (i) that they do not challenge their obligations of membership in the Warsaw Pact, and (ii) that they do not depart from use of the term "socialist" as the official designation of their economies. So tenuous is today the Soviet hold over these countries that I personally doubt that military intervention in any of these countries, along the lines of the action in Hungary in 1956, would now be a realistic option of Soviet policy. Not only would it be in crass conflict with Gorbachev's public commitments, but the consequences in the remainder of the satellite area, and among non-Russian nationalities of the Soviet Union, would be unpredictable.

(c) I do not consider that our Government has made the efforts it could and should have made to reach acceptable agreements with the Soviet side for the reduction of either nuclear or conventional weapons. While this question is too complex for detailed treatment in this statement, I would like to offer these general comments:

There have been, in recent months and years, several interesting and encouraging initiatives and suggestions from the Soviet side to which we have been essentially unresponsive. Obviously, these initiatives and suggestions could not be taken at face value; they all called for explorations, in discussions with the Soviet side, of their reality and practical significance. But this exploration has not been seriously undertaken. I think it should have been.

The problem of reductions in conventional armaments has been needlessly complicated and distorted by the egregious exaggeration of the existing Soviet superiority in such weapons that has marked the public statements, and apparently the official assumptions, of our Government. This, obviously, should be corrected.

The arsenals of nuclear weapons now in the possession of the Soviet Union and the United States are plainly vastly redundant in relations to the purpose they are supposed to serve. Owing to their overdestructiveness and their suicidal implications, these weapons are essentially useless from the standpoint of actual commitment to military combat; and whatever "deterrent" function they might usefully serve could be effectively served by far smaller forces. The statements and policies of our Government appear to reflect an assumption that the maintenance of these excessive arsenals presents no serious problem, and that there is no urgency about the need for their reduction. I cannot share this complacency. Not only is there the danger that these weapons might come into use by accident, misunderstanding, or other inadvertence, but there seems to be a real and immediate danger that there will be further proliferation in the coming period. This danger calls urgently for a vigorous attack on the whole problem of proliferation; and a prerequisite for such an attack would be, as I see it, extensive reductions in the holdings of the two superpowers. It is unrealistic to suppose that the United States and the U.S.S.R. can continue indefinitely to cultivate these weapons in such excessive numbers and yet successfully deny to most of the world's governments the right to cultivate them at all.

(d) The domestic-political personal situation of Mr. Gorbachev is indeed in certain respects precarious, particularly in view of the meager results to date of his program of perestroika. But his position also has had important elements of strength, as does his program; and both have now been strengthened by the results of the recent election. His initiatives in foreign policy have not met with serious internal political resistance. There is therefore no reason to suppose that agreements entered into with his government under his leadership would not, if properly negotiated and formalized, be respected by his successors.

In summary, it appears to me that whatever reasons there may once have been for regarding the Soviet Union primarily as a possible, if not probable, military opponent, the time for that sort of thing has clearly passed. That country should now be regarded essentially as another great power like other great powers—one, that is, whose aspirations and policies are conditioned outstandingly by its own geographic situation, history, and tradition, and are therefore not identical with our own but are also not so seriously in conflict with ours as to justify any assumption that the outstanding differences could not be adjusted by the normal means of compromise and accommodation. It ought now to be our purpose, I consider, while not neglecting the needs of our general security, to eliminate as soon as possible, by amicable negotiation, the elements of abnormal military tension that have recently dominated Soviet-American relations, and to turn our attention, instead, to the development of the positive possibilities of this relationship, which are far from insignificant.

The CHAIRMAN. Thank you very much, indeed.

Senator Biden.

Senator BIDEN. Thank you.

Welcome, Mr. Ambassador. It is an honor and a pleasure to have you here.

In your diaries, which are about to be published, an excerpt of which appeared in this month's Atlantic, you described an encounter you had with Mr. Gorbachev at the signing of the INF agreement, where you said, "He looked me seriously in the eye and said, 'Mr. Kennan, we in our country believe that a man may be the friend of another country and remain, at the same time, a loyal and devoted citizen of his own, and that is the way we view you.' "

You go on to say that you reflected on Gorbachev's words, and I thought your comment was fascinating. You said, "The whole 60 years of my involvement with Soviet affairs, which included at one point being banned from Russia as an enemy of the Soviet people, revolved before my eyes. I reflected that if you cannot have this sort of recognition from your own Government to mark the end of your involvement in such a relationship, it is nice to have it, at least, from one's adversary."

Well, Mr. Ambassador, I cannot speak for the whole Senate. I cannot speak even for this committee. I can only speak for one Senator, who I am confident represents at least many, many Senators with whom I served in the past and presently serve, when I express a deep appreciation and admiration for your lifelong efforts to bring reason and the strength that comes from reason, which is so often missing in this Government and all governments, to American foreign policy.

You have not always had your views heeded over the last 60 years, as you would be the first to recognize, and as I think you made oblique reference to a moment ago. But you have voiced your views clearly and eloquently with a sweeping view of history and a clarity that few have ever been able to express.

And you have done it without regard to the prevailing fashion, the prevailing political fashion. I think, in doing so, that you have made an enormous contribution to your Nation, and I applaud you for that and for the standard of devoted public service that you have shown and continue to express.

And now, assuming that such praise has not put you off your stride, I would like to proceed with one question and come back to others, because I am supposed to be down at the White House, and, as much as I respect you, I do not want to keep the President waiting. As a matter of fact, I'm sure he won't wait.

The Helsinki Conference in Moscow, which is so sorely desired by Mr. Gorbachev, is viewed by some as a yearning and an overwhelming desire on the part of Gorbachev to have an unearned stamp of legitimacy put on Soviet human rights policy.

Let me raise with you the following proposition.

Gorbachev cannot fail to understand that with this conference will come probably thousands of Western journalists, thousands of observers, thousands of people, who will be wandering, roaming, probing, and looking into Soviet life as best they can, not only in Moscow but in the environs.

How would you respond to the assertion that he quite possibly might want the Helsinki Conference in Moscow to raise pressure internally, rather than to receive an external stamp of approval?

Ambassador KENNAN. I think Senator Biden, that that is absolutely correct.

I think that he sees in holding this conference in Moscow a means of furthering his own efforts on behalf of human rights in Russia.

He has gone farther to date than I would ever have thought possible that anybody could do in 4 years. This is a country with scarcely any tradition of democracy whatsoever.

There was in the late tsarist period, a fairly good system of jurisprudence, and certain of the human rights that we are talking about began to be recognized around the turn of the century in that country.

But, beyond that, there has been very little at all. And, of course, this generation of the population in the Soviet Union does not remember anything really beyond or back or World War II. They don't have any memories of that time.

So, this is something wholly new for them. I think that Gorbachev has pushed it as far and as fast as he can push it by his own efforts within Russia.

I hope and think it likely that he views this conference as a lever by which he can induce his own people not only to push human rights further, but also by which he can render those reforms which he has already put in motion irreversible.

Senator BIDEN. Thank you very much.

If time permits, I would like to ask you some questions about Eastern Europe if my colleagues do not cover that, though I am sure they will, at least in part.

Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Lugar.

Senator LUGAR. Thank you, Mr. Chairman.

I join my distinguished colleague, Senator Biden, in his eloquent tribute to you, sir. Your contribution has been enormous, and it is a real privilege to have you before the committee this morning.

Ambassador KENNAN. Thank you.

Senator LUGAR. Let me just ask this. From your studies over the years and your understanding of the Soviet people, to what extent should we anticipate that the tradition of long-suffering Soviet populations enduring political and economic deprivation is likely to continue?

Even though there have been some openings and opportunities, through these elections; for example, and through some minimal amount of market economics, could we anticipate that, if perestroika did not work or another authoritarian regime came to power, one not of the Stalinist variety, that the Soviet people would continue to suffer through this with a certain fatalism and that one cannot anticipate too much improvement in this life?

Ambassador KENNAN. Yes. I don't think we can build too much at present on the understanding of the masses of the Soviet people for democratic principles.

I think they resent ill-treatment at the hands of a government. They would like the government to treat them better. And I think they do have a feeling for human rights, within limits; that is, they have a feeling that the citizen ought to have certain protections against arbitrary treatment, arbitrary arrest and punishment, that sort of thing. But when it comes to the operation of a real democratic system, with all the checks and balances, all the compromises that have to be made, those things which you gentlemen understand so well, I think it will be a long time before the Russian people will come to anything like that.

There is a certain danger here. It is not, as you correctly said, the danger of a return to Stalinism, but there might be setbacks in the degree of authority exercised by the central government. I quite agree with that.

There are, of course, important differences, highly significant ones today, between the reactions of the Russians, as a national, ethnic group, and the reactions of some of the non-Russian nationalities in the Soviet Union.

Some of those non-Russian nationalities are better schooled in the devices of democracy than are the Russians. Others are probably even less well schooled than the Russians. There is no uniformity among them.

But there are great differences here between those non-Russian nationalities and the Russians themselves.

I think that the question you put is one that we should all put to ourselves. It is a very reasonable question, and we must be on the alert to see how things go.

This present situation in the Soviet Union is highly unstable, and even unstable to the point of dangerousness. It could go in all sorts of ways, and we have to watch it very carefully.

I hope that it won't go in the way that you fear might be possible. But you cannot be absolutely sure.

Senator LUGAR. Let me ask another question about instability.

Clearly, during the elections in the Baltic states, there were some contests that were vigorously contested. It may be in Latvia, Lithuania, and Estonia one finds examples of persons who have had more interest in democratic systems and who really want to pursue that.

Ambassador KENNAN. That's absolutely true.

Senator LUGAR. Perhaps in the southern regions of the Soviet Union there are states that have not had that kind of experience or tradition, but simply resent Russians, and are at some point unstable because of their resentment of the Russian people, who are becoming, at least according to demographers, as you pointed out, a potential minority.

What are the likely courses of action for these two types of situations? Granted there are a myriad of others along the spectrum. But what options are there for the Estonians, the Lithuanians, and the Latvians? Is it one of simply pursuing the current situation to see what the limits of tolerance are, how much one can work out of the current system, as opposed to going into absolute revolt?

Could you express what could be the possible reactions of the Moslem-related southern Soviet states?

Ambassador KENNAN. Yes. There is, of course, a total difference between those two groups of people.

The three Baltic countries—I lived in them for 2 years, when they were enjoying their independence. They were all the usual bumps, troubles, and so forth; but these peoples were all beginning to make a success of governing themselves.

It was new to them in 1919, when they became independent countries. But by 1939 they were doing not badly, particularly the Estonians. The Estonians were developing along what I would call Scandinavian lines. They are first cousins to the Finns.

They do face a choice. They will want to go as far as they can in recovering their independence.

But there are dangers if they push it too far and too fast. I think they are becoming aware of those dangers, particularly in Lithuania. And even the new national movements, which have grown up in those countries, which are separate from the Communist Party—even those movements are beginning to realize that their best chances lie in a certain gradualness, keeping a certain amount of pressure on, but not too much, not enough really to frighten the Russians into doing drastic things.

I hope that they will go on in that prudent way and will not push things to a crisis. I think they will, if they follow that policy, they will succeed in achieving a very large measure of autonomy and, eventually, of getting a relationship with the Soviet Union which will satisfy both parties.

Now, as for the Moslems, they are in an entirely different situation. They, I think, are very often divided within themselves in their feelings about the countries that lie to the south of the Soviet border. I just don't know what they are going to want.

There are elements involved there, in the feelings of those people which surpass my expertise.

I do not think that, today, any of them really wants complete independence because I think they realize they are not prepared for it. Even the Armenians do not, because the alternative for the Armenians to being a part of the Soviet Union would be to find themselves alone again, in confrontation with the Turks. They have bitter memories of that.

So, that is a very complicated situation. I do not anticipate as much trouble down there as I do with the Western nationalities, which Stalin, unwisely, improperly, and in a shocking manner took into the Soviet Union in the early period of the Second World War.

Senator LUGAR. To what extent, Ambassador Kennan, do you believe that General Secretary Gorbachev and the leadership of the Soviet Union realize the extent to which Soviet economic growth and technological development have fallen behind the Western Europeans, the Japanese, and ourselves? Obviously, they understand that a significant gap exists. But perestroika, and its continued emphasis on socialism, would indicate that even though they see a large gap, they are constrained by the existing philosophy of the regime, and, therefore, destined to come up short in terms of closing that gap.

Their economy is not in total collapse, but it has achieved minimal growth, or no growth, and it has been very disappointing with

regard to both international competition and consumer expectations.

Do they understand the contradiction between trying to maintain socialism and needing to institute fundamental reform and simply feel entrapped by it? How would you describe their dilemma?

Ambassador KENNAN. That varies very greatly with the people you are talking about in Moscow. Some of them fall into one of these views; some of them into the other. They are well aware, the leaders are, of the alarming degree of failure of their system to measure up to the international competition of this day and age.

It is my own impression that, if given time, and that may be another 5 to 10 years, Gorbachev will make out of the Soviet economy something better than it has been in the past.

But, whether this will ever be enough to permit them to catch up to the other advanced countries of the world is a very serious question. It may be that their socialist principles simply will not permit that.

But, there are various forms of socialism, I mean officially. The Scandinavian countries have been in the hands of what began as social democratic parties, essentially socialist parties, yet they have evolved in such a way that they could now meet the terms of international competition. Perhaps the same thing can happen in Russia.

I do not think we can quite predict how all this will come out. I do not think they have to become exactly like ourselves; that they have to have the same kind of free enterprise system that we have. But, they certainly are going to have to loosen up a great deal more ideologically than they have to date if they are going to try to become a competitive power.

I think it is very important for us to recognize this because if what I have said is correct, it means that for a long time into the future, we do not have to fear the Soviet economy or whatever might be done to strengthen it.

Senator LUGAR. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Senator Sarbanes.

Senator SARBANES. Thank you very much, Mr. Chairman. I want to join with you and my colleagues in welcoming Ambassador Kennan this morning.

As a diplomat, a scholar, and really an educator of extraordinary accomplishment, I think Ambassador Kennan is uniquely qualified to open these hearings of the committee on the future of United States-Soviet relations.

Ambassador Kennan, you have made a major contribution to our understanding of the complexities of the United States-Soviet relationship, and have avoided the sharp swings from one extreme to the other that I think have too often, unfortunately, characterized our policy.

You have been a source of inspiration to young diplomats and scholars. I am struck, in fact, by the number of young people attending this hearing this morning, who are standing in line out in the hallway waiting to get in.

The Kennan Institute for Advanced Russian Studies at the Smithsonian's Woodrow Wilson Center is a lasting tribute to your work.

So, we are very honored and pleased to have you with us this morning.

I would like to ask something that is in a sense, a followup to some of the questions that have been put to you.

And that is whether the pace of change, either in Eastern Europe or within the Soviet Union itself, particularly as it relates to the nationalities, will be so rapid and so far-reaching that it will provoke some sort of counterreaction that will bring all of these developments to a halt; and, in fact, turn things in a negative direction?

How much apprehension do you have that that might occur?

Ambassador KENNAN. Well, I have considerable apprehension about that I must say, because the multinational, multilingual quality of the Soviet State, what used to be the Russian state, was already being put to severe tests in the end of the tsarist period.

It is significant that the forces of modern nationalism tended to break up the great multilingual empires, the Turkish one, the Austro-Hungarian one, the German one. And these same strains have made themselves felt on what was the traditional Russian Empire.

If you had asked me 10 years ago whether this question—as to whether they could hold together a great multinational empire of this nature—was an urgent one, I would have said "No," that I thought it was a long-term problem and a very serious one for the Soviet State, but not a short-term one.

Now, what Gorbachev has done, and I think inadvertently, is suddenly to make out of this a short-term problem. It is a very explosive one. It's going to be the hardest problem in my opinion that he has to face, even harder than that of the resurrection of the economy. And we will have to watch it very closely.

The best that we can hope for I think is that the Baltic countries and portions of the countries further south—there was a portion of Poland and a portion of Rumania which the Russians took—that these will be able to find a new relationship, both to the West and to the Russian center, which will permit them to have greater satisfaction of their own national ambitions without provoking the Russians into violent and unwise actions.

But, it will take statesmanship of a certain sort on the part of those governments, particularly in the Baltic, if that is going to happen.

All I can say is this, there is a general principle that I have come to late in life. I have come to believe that the abrupt things in international life do not work very well; that the best forces in international life are the gradual ones. I do not believe in revolutions and great, sudden changes in the lives of people anymore.

And if the Baltic governments can accept that principle and say, "Yes, we want our independence, we want our autonomy anyway, we want to play an independent role in the world," they can have it. But they cannot have it all at once, not too fast, not in a way that humiliates anybody else or raises questions of prestige which are insoluble.

This would be my advice to them today. I hope that things will move along that line.

Senator SARBANES. I would like to take advantage of your presence here as a former Ambassador to Yugoslavia and ask you to take a moment or two to comment on the rising tensions in Yugoslavia, and their potential significance for East-West relationships.

Ambassador KENNAN. Well, I am very glad you asked that question. I think that this is a situation as serious in its implications as are the centrifugal tendencies within the Soviet Union.

The Yugoslav state, as it was set up in 1919, was an artificially created state. I am not sure that it was the wisest decision there in 1919. But, it is also a multinational state and one which is now being subjected to the most dangerous of strains.

Yugoslavia has about eight different neighbors, almost all of which have Irridentist claims; that is, they would like to recover parts of the Yugoslav territory if they could. And this creates a very dangerous situation.

It was not by accident that the First World War originated in that part of Europe. I think that very dangerous things could happen there again today if this goes farther.

Obviously, it is hard for the Yugoslav nationalities to continue to live together. Perhaps they should never have been united in the way that they were. But, after all, this state has existed now for 60 or 70 years, and to break it up would be even more dangerous than trying to keep it together.

Again, one must hope. All of us, I think, who have lived and served in that country, came to have great sympathy and understanding for the various Yugoslav peoples. They are wonderful peoples in many ways.

So, I can only hold my breath for them. They do not have the sort of leadership that they had. The one thing that could be said about Tito was what was often said about him in Yugoslavia: that he was the only real Yugoslav. He did hold his country together as nobody else has been able to do.

So, let us hope.

Senator SARBANES. My final question has to do with the ideological content of Soviet foreign policy. Your view is that it has now pretty well been abandoned, I take it?

How confident are you that it will remain abandoned, because obviously there is a long tradition of highly ideological content in Soviet policy; and I was interested in your responses about Gorbachev going back to Lenin but how confident are you that that will remain absent from Soviet policy?

Ambassador KENNAN. I am quite confident that Marxism of the Leninist type or, of course, of the Stalinist type—Marxism as people have endeavored to realize it in Russia since 1917—is a force which is on the way out, not only in Russia but across the globe.

It had profound deficiencies as an ideology. It was not fully responsive to human requirements. It was something that took account if you will only of the tragedies of class differences in the early period of the industrial revolution, but which took no account of the fact that immense tragedies lie largely within people themselves, within the individual.

I remember my friend, Chip Bohlen, saying to me when we were living in Russia together in 1937 that "This system will not last because it has no answer to the phenomenon of death." And this was a very profound observation.

So, I think that Marxism of that type is on its way out. I think that it is a dying force. It has been evident all through this century that nationalism really was a stronger force, anyway, than class interest. It was one of Marx' great mistakes to believe otherwise.

I do not think we have fear that kind of Marxism. I think we have more to fear in the extremisms of nationalism, in those parts of the world where it is rather new. We do not have to fear it anymore, thank goodness, in Western Europe. It was the bane of Western Europe; it produced two great World Wars which tore Europe to pieces and from which Europe has never fully recovered.

But, I think the Western Europeans have now realized this, and when you see the relations between France and Germany and others, I think this is a great hump that they have gotten over.

I am not sure that that is true about Southeast Europe or about the nationalities that might be liberated from their inclusion in the Soviet Union.

But, Marxism is not what I am afraid of for the coming period.

Senator SARBANES. Thank you very much, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Kassebaum.

Senator KASSEBAUM. Thank you, Mr. Chairman.

I join, too, with my colleagues, Ambassador Kennan, in saying it is an honor to have you sharing your observations with the Foreign Relations Committee this morning; and to express my appreciation and gratitude for your distinguished and dedicated service to this Nation and the Western world, I would say.

Ambassador KENNAN. Thank you.

Senator KASSEBAUM. Generations to come will be studying your words as they have guided us and our predecessors on this committee. There will certainly be those who will follow us here.

I would like to explore a little bit your thoughts on Mr. Gorbachev's relationship with the military, his military.

Ambassador KENNAN. That is a very good question, I must say, because that is, to date, an unexplored area of Gorbachev's concerns. I do not think we know what has been happening there.

He has himself said, or rather, Shevardnadze did recently say in an internal speech that he gave in Russia, that we have not yet been able to get complete understanding among our military for the things that we are trying to do.

I am sure that is true. I think it is very difficult to take a great military machine like that and to turn their views around as suddenly as Gorbachev has tried to turn the political views of his leadership around.

I think they have come some distance in that direction, but not entirely. There has been no tradition in Russia of military takeovers of the government. Even in the tsarist time or in the Soviet time, there has never been what is called Caesarism, as a phenomenon in the Soviet Union.

And in general, the military people have accommodated themselves to the political will, whatever it was. I do not doubt that the

unilateral cuts that Mr. Gorbachev has announced have caused very considerable concern and discomfort, and perhaps some indignation even in the military establishment.

But, I think they have to recognize ultimately that the maintenance of so great a military establishment—and Senator Helms was not wrong in calling attention to this—is an abnormality for a country in the economic situation in which Russia finds itself today.

They simply cannot afford to maintain so vast a military establishment as they have been maintaining. And the people in the military arm will have to accommodate themselves to that sooner or later.

If it is not Gorbachev, it will have to be somebody else who will someday have to say to them, "Look here, a country with this economy cannot afford this sort of military establishment." They cannot do it indefinitely.

I do not know whether it is 19 percent or what it is that they take of the national income. I do not think anybody knows that exactly, but it is inordinate in any case. And today it is a luxury that cannot be maintained.

This will be part of the task of political leadership, to persuade the military people of that painful recognition.

Senator KASSEBAUM. Would there be any temptation, say, on the part of Mr. Gorbachev, to use the military or of the military themselves believing that they should exert a more forceful role in dealing with, say, the turmoil in any of the non-Russian nationalist areas, say, between the Azerbaijanis and the Armenians, and so forth?

Might there be some friction there between what the military would see as an effort to bring the non-Russian nationalities under control? Or is that not a factor at all?

Ambassador KENNAN. Well, there may be reluctance on the part of the Russian military to be used for that purpose, although not as much as there would be I think in other countries.

Because I think one of the reasons for the cultivation of these great armed forces has always been the sense of insecurity of the central government in Russia in their relationship to so vast an empire. And they have regarded this great big armed forces establishment as one of their safeties in that respect.

I do not how the military themselves look on this. They have a very large component, I believe, of Moslem men in the whole Soviet armed force establishment today.

On the other hand, I gather that in the end, the Moslems have proved quite reliable in Afghanistan. At first the government was frightened, feared to use them there for fear that they would sympathize too much with the opponents. But, I gather that in the end most of them proved to be all right.

Now these are some of the great problems that they are going to face, both with their nationalities and with their handling of their own military people.

Senator KASSEBAUM. I thought you had a very interesting exchange in the MacNeil-Lehrer show before Christmas. That was such a thoughtful opportunity to hear some of your views.

I wonder if you could elaborate on some comments that you had made there regarding whether this country, and in many ways, too, the Soviet Union perhaps, could adjust psychologically to the absence of an enemy?

Ambassador KENNAN. It is a great question. It is not an absurd one.

Senator KASSEBAUM. No, I thought it very interesting.

Ambassador KENNAN. As you know, we have cultivated a tremendous military establishment, which plays a corresponding role in our whole economy.

And I have often felt and said that I thought that the habit of spending $150 billion, or whatever it is annually, on military matters, on the military establishment, has become an addiction of American society. And the withdrawal symptoms might be extremely painful ones.

So, this is not an absurd thing. I think we should begin to think about conversion to peaceful purposes of a great deal of our military industry. I think it is not too early, at least, to begin to think about that.

We cannot tell when we might be confronted with that problem. But, one of the reasons why I feel so strongly about arms control and about really exploring all of the possibilities for negotiation with the Russians for a negotiated reduction is that I think a diminution of our entire military establishment could not come too soon for the health of this country.

I think we have an interest in seeing this brought down.

Senator KASSEBAUM. Ambassador Kennan, has not the Soviet Union as well been able to galvanize the population because of the fear of the outside world? Is it not also perhaps psychologically a problem for them as well, as these changes are taking place?

Ambassador KENNAN. This was something that Stalin tried very hard to do, and successfully to do. But, I must say that Gorbachev has shown great courage in taking the opposite line and saying, "No, we do not need to fear the outside world to this extent today."

And he has not used that as a lever for trying to get support for his policies. I give him full commendation for that.

But, of course, as you say, it is a danger with all of us. We have geared our thoughts, our plans, our calculations for 40 years to the assumption that we had here a great and dangerous enemy which, if not deterred, would do something horrible to us.

It is that assumption, which is now disintegrating under the impact of the changes that have been happening in Russia and in the rest of the world in the last 4 or 5 years, that presents a challenge to us.

I think that we must begin to think about how we respond to it.

Senator KASSEBAUM. Thank you very much, Mr. Ambassador.

The CHAIRMAN. Thank you.

Senator Sanford.

Senator SANFORD. Thank you, Mr. Chairman.

Mr. Chairman and Mr. Ambassador, I apologize for not being here in time to hear all of your testimony. I got so absorbed in reading about you and your excellent new book this morning that I have been one-half hour late all day. [Laughter.]

Let me ask you this; I do not think you have commented on it, but it is relative to questions of security. Our policy of trade and our care, and maybe too much care, to protect technology. What should be our trade policy now with the Soviet Union?

Ambassador KENNAN. In my opinion we should permit trade to proceed normally wherever American businessmen want to conduct it. I do not favor any special efforts on the part of our Government to bring financial aid to the Soviet Government. They have not asked for it, and I would not favor it if they did.

I do think that we should remove the abnormal restrictions to trade that exist in the form of the amendments that were put into force, the amendments to the trade agreement way back in the 1970's. I think they served no very useful purpose at any time, and certainly not today, and they should be removed. But, beyond that, I do not think we have too much to hope; I do not think American-Soviet trade is going to assume major dimensions. They do not have the wherewithal with which to buy a great deal from this country. And we are not a major exporter to the Soviet Union.

I am not sure I have answered all of your questions though, Senator Sanford.

Senator SANFORD. Well, I think you have, except maybe what some people thought recently, at least, was a paranoia as to technology, however that might be defined.

Ambassador KENNAN. Yes, that is right. I have the impression that we have been much too restrictive. So far as I can see, there are very few technological innovations at this time which can be kept secret in any great modern country.

We have had a tendency to deny to the Russians, for our own reasons, things which they can perfectly easily buy in other countries. That, I think is unwarranted and unwise.

I would like to see us stop doing that. We simply punish ourselves.

Senator SANFORD. Well, I thank you very much, and I apologize again for having to leave, but I have got to straighten out the savings and loan situation before noon. [Laughter.]

The CHAIRMAN. Thank you.

Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman.

May I compliment you, Mr. Ambassador; seldom does this committee have the opportunity to hear testimony from not only a scholar, but an individual with your extraordinary background and commitment to public service which you have had, and clearly an expert in the area in which you have communicated your particular concerns to us.

I have a very brief initial question, and that has to do with a portion of your statement where you indicated, so tenuous is today the Soviet hold over countries, that I personally doubt military intervention in any of these countries.

I wonder, sir, if that would include in your assessment Poland as well?

I do not mention that, of course, as a consequence of my "Irish" ancestry.

Ambassador KENNAN. Yes, I do include Poland, Senator. I think had it been otherwise, the Russians might have been brought to in-

tervene in the face of all of the things that have happened in Poland in these last 7 or 8 years.

It seems clear to me that the Polish Communist Party has definitely lost its position of preeminence in the life of the Polish people. It takes second place to the church and to Solidarity, certainly to the combination of the two of them. That is a fundamental change in the situation in Poland, and the Soviet Government has observed restraint.

I think I would cite that as an example of what I have said here.

Senator MURKOWSKI. Mr. Ambassador, you indicated your concern over aspects associated with an unrestricted perhaps unified Germany. I am wondering if you could give us a little oversight on what you see evolving on the issue of a unified Germany, East-West, as a consequence of the relaxing of tensions by the Soviet Union and more of a normal evolution occurring as well as the situation with the divided or undivided Berlin, the Berlin wall, et cetera. What might we expect specifically with regard to a unified Germany and Berlin?

Ambassador KENNAN. I think there is no possibility of a unified Germany within the foreseeable future; that is, in the next few years. No German politician can renounce the dream of an ultimate reunification of this country, but the circumstances do not permit it at the present time, and I see no prospects that they will permit it within the next few years.

Senator MURKOWSKI. "They" being the East Germans or the influence of the Soviet Union in permission?

Ambassador KENNAN. Above all, the membership of these two parts of German in different military alliances, which is the outstanding thing that separates them, but also the Berlin question.

This is a matter with which I have had a good deal of contact in my life. I lived in Berlin for about 5 years. I think it is a great city and has been a good force in German affairs and that there will really have to be some sort of solution of the Berlin problem before you could get anything resembling a unification of Germany.

My own feeling is that the best line for Europe to proceed in this respect with regard to Berlin would be to Europeanize the city. I am saying this in an article which is soon to appear in publications here and in Germany.

I would like to see it taken under the wing of the European community or of some other general European entity and made the first fully European city with a European passport with a European flag and all that.

Senator MURKOWSKI. Does that imply the elimination of the wall?

Ambassador KENNAN. It certainly would, and it would imply ultimately the withdrawal of the Government of Eastern Germany from the eastern part of Berlin. That could be done gradually. But there is a long tradition of German cities having a different status than the territory by which they were surrounded. This was true with the old imperial cities of Germany. It was true with the Hanseatic cities, and I remember living in the Berlin of the period of the Weimar Republic when it harbored both the Government of Germany as a whole, but also the Prussian Government. And perhaps with ingenuity some solution could be found to that.

Senator MURKOWSKI. Do you have any timeframe in your article where you generalized on when that might occur?

Ambassador KENNAN. No, but I am pointing out that as these Eastern European countries recover the freedom to design their own relationship to Western Europe this is going to put a strain on the abnormal situation of Berlin, and it is high time that people on both sides of the line began to think more imaginatively and less timidly about this question than they have thought in the past.

I would like to make one thing clear. I would not personally favor any unification of Germany which was not accompanied by a very firm association of Germany with a European organization of some sort. I think it was a mistake at the time of the Versailles Conference to set Germany up again as the only great unified state in central Europe without any obligations to other people, and we saw what came out of it. I think we should avoid doing that a second time.

I regard the solution of the German problem as coming only through the tendencies toward a unification of Europe.

Senator MURKOWSKI. As we reflect on the structure of perestroika returning to a market force, the relative reality associated with the nonconvertibility of the Soviet currency, the rapid formulation of joint ventures by American industry groups clearly reflect a contribution, if you will, toward a market economy being established within the Soviet Union.

The reality that they have tremendous resources but a delivery system that is archaic, how do you see fitting into a reasonable timetable the convertibility of the Soviet monetary system because now if you are going to go in a joint venture, you can take your oil out as an example, but you might not be able to transport it to a port to get it out in a world market. You have to take it in kind.

I am wondering with the Soviet Union's tremendous gold reserves is there any likelihood that it would make sense to pledge gold behind their currency to try to get it convertible. If you could, just give us a little review of what you see happening in that area to foster an expedited economic time schedule, I would appreciate it.

Ambassador KENNAN. Well, if they were able to do it, I think it would be fine.

Senator MURKOWSKI. If they were able?

Ambassador KENNAN. That is to go onto a gold standard. This was, incidentally, a great issue in the final years of the tsarist period, and they did at one time, they did go on the gold standard, and it was quite successful.

I think it would take a long time for them to get back to anything like that today. I do not think we could expect it in the near future. And I think the best we might be able to expect would be, in connection with these joint ventures, a sort of dual currency system in which they will have one which is convertible with the West and one which is not as a transitional period. But they will have to pick up their economy very greatly before they can meet that sort of competition which a convertible currency would imply.

Senator MURKOWSKI. Why is it impractical to suggest that they would accelerate their gold production and simply pledge it behind

their currency so it could be convertible? What is the fallacy in that?

Ambassador KENNAN. I am not sure how much their gold production can be accelerated. They have been drawing on it for many years, as you know, as the tsarist government did, and I think the more they draw on it, the more expensive it becomes to get the stuff out, because they have probably used the most easily accessible sources of it, used them up as they have in many of their other natural resources. So, I think they have a lot of work to do.

On the other hand, the joint ventures ought to be approached in each case with great prudence because they have produced many problems in the past. If well designed, if all of the problems are anticipated and if they are all embraced and treated in the agreements, then I think this is a promising way to go, but it is nothing for anybody to wander into lightly or ignorantly.

On the other hand, it has a certain tradition, a certain old model before it, because even in the tsarist times, a great deal of the economy of Russia was conducted by foreign interests. You have the Rothschilds developing the oil fields and the Swedish family whose name I forget—well, the Nobel family, of course, and this was not just developing the oil fields. But they had great commercial networks running way up the Volga Valley. The Germans have the same thing out in Siberia.

So, the Europeans played at one time a very useful part in Russia, and I think this can be done again on the basis of the joint ventures.

Senator MURKOWSKI. Thank you, Mr. Ambassador.

The CHAIRMAN. Thank you very much.

Senator Moynihan.

Senator MOYNIHAN. Thank you very much, Mr. Chairman.

Ambassador, this is a historic moment for our Foreign Relations Committee as well as for the Nation to hear you speak this long after the long telegram, you might say, and to such a different perspective. I mean, to such a different conclusion.

In response to Senator Murkowski you mentioned the Versailles Peace Conference. You sometimes refer back to 1919 and the last tsarist people. I wonder if I could take you back and ask you if you would speculate about the future in this sense: That if we have come to the end of the period of the Russian Revolution, as you said earlier, is it not time to give some thought to whether we should now resume in some modified form the Wilsonian project.

There was that drama of 1919. I think Herbert Hoover said in that year Woodrow Wilson achieved a status in the world which no man before or none since has ever had. And yet Lenin appeared to have prevailed.

Well, Lenin did not prevail. The United States is a country which once was very deeply devoted to the idea of law and international relations and international organization. I know you have been skeptical about Wilson, and yet the question arises: We used to very much believe those things, and if we do not believe them anymore, what do we believe?

Would you comment on the future of a new international regime, one in which the Soviet Union ceases to declare itself to be the next stage in history and, therefore, not bound by the rules of this

stage; an international regime in which the Soviet Union is a great power but part of an existing order. Do you see it as an order that in some way could be accommodated to Wilson's visions?

Ambassador KENNAN. Yes, you are right. I was long skeptical about Wilson's vision with relation to the time at which it was brought forward. But I begin today in the light of just what has happened in the last few years to think that Wilson was way ahead of his time in his views about the international organization.

You see, just as I feel that the cold war is now ending, I feel that another great and tremendous problem is growing upon us, or rather a double problem. One part of it is to get rid of the weapons of mass destruction which are too terrible to be permitted to rest in human hands as they have in the last few years. The other is to face up to the planetary environmental crisis which is now, if we can believe the scientists, growing upon us.

Whether you believe any one prognostication or not, the combination of what the scientists are telling us, the general lesson of what they are telling us, is that we have a much shorter time than we think to put things to rights on this planet if our descendants are going to have any sort of civilized life in it at all.

This, to my mind, is going to require a realization of the dream of international collaboration which Wilson had. I do not see any other way out of it. Of course, this is one of the great favorable possibilities I had in mind for our relationship with the Soviet Union; that is, collaboration in the field of environmental improvement. And I think we would find that if we would develop those possibilities, then the rather morbid elements of military rivalry and fear which have dominated our policy for so long and with some reason would begin to die of themselves. That would be a very good thing.

But I think the possibilities go far beyond that. They embrace the entire world community, particularly in the northern hemisphere. And I think we are now going to have to turn to that problem. We are going to have to take the leadership. There is no other country that could do it, as we could do it in bringing the community, the whole international community, together in a really courageous and far-reaching attack on this problem of the deterioration of the environment of the planet for the sustaining of human life.

Senator MOYNIHAN. Well, sir, could I ask would you also think that in this general pattern of international cooperation there is a role for the peaceable settlement of disputes and for international organization as a mediator of conflict?

Ambassador KENNAN. Well, that, of course, is a more difficult thing, but I can see if there could be organized the sort of international attack on the environmental problems which ought to be organized, many of those other intramural quarrels of the international community might of and by themselves fade into the background.

Senator MOYNIHAN. This is your theme of gradualism. Learn to do things and build confidence from them.

Ambassador KENNAN. That is correct.

Senator MOYNIHAN. Sir, I think that is a hugely helpful statement, and I think that we may be back in 1919—maybe we know a little more than we did, but we ought not to be less helpful.

Ambassador KENNAN. I think we have to today. We have to resume it. We have to make a success out of it.

Senator MOYNIHAN. To resume.

Ambassador KENNAN. Yes.

Senator MOYNIHAN. Thank you very much, Mr. Ambassador.

The CHAIRMAN. Thank you very much. We really appreciate the time and thought that you have given to these answers. I have a couple of further questions.

You mentioned in your statements earlier that in your conversation with Chip Bohlen some years back that he felt that the failure of the Soviet Union would come from their lack of an answer to death. But what other countries do have answers to death as governments?

Ambassador KENNAN. I do not know about the Moslem faith, but I do know about the Christian faith, that it does.

The CHAIRMAN. As a people but not as a government. As a people but not as a country.

Ambassador KENNAN. I beg your pardon?

The CHAIRMAN. As a people but not as a government.

Ambassador KENNAN. Well, I think people have to live by some form of faith, and they have to feel that when they try to do the decent and right things, that it is for values that exceed the period of their own lifetime. How they state that, how they see it stated in their religious beliefs is another thing.

This is, if you will, an idealistic belief, but I think people need that. They have to have it. The Communists did not give it to them. There was nothing more pathetic than a Communist funeral in Russia.

The CHAIRMAN. Another point that you mentioned was the tendency of the Baltic countries to regain some of their independence. Do you think that our present policy is correct of recognizing the Baltic countries?

I remember many years ago I used to be the Baltic desk officer, and we would be in touch with the Lithuanian, Latvian, and Estonian legations to continue to make sure they got adequate funds, et cetera. Do you think we should continue that in this new era of glasnost or do you think we ought to change that?

Ambassador KENNAN. I think that could be regarded as something which has passed its time, and there are better ways today of promoting the interests of those Balkan peoples than by making an issue of this formal nature with the Soviet Government.

This is a commitment, of course, to their independence, but I do not think it needs to be or can usefully be emphasized today.

The CHAIRMAN. I must say having done that job once, I would agree with you.

In answer to Senator Murkowski's question concerning Poland, would you concur in the fact that if the Poles had risen, if General Jaruzelski had not been able to hold the lid on things there, that the slaughter and the mayhem would have been immense, the Poles being the brave and reckless people they are who charged the German tanks with lances at the beginning of World War II and whose hatred of the Soviet Union and the Russians is shown by the pictures of so many of their people in Siberian prison camps.

I was wondering what you thought the effect would be had they not held the lid down in Poland, if Poland had done what Hungary did.

Ambassador KENNAN. It could have been a terrible thing for everybody concerned. I think Jaruzelski was in a way the best thing that could have happened with Poland. He is the Russians' last card in that country. If he failed them, I do not know what they would do.

The Communist Party simply alone could not bear this burden anymore. I think what we are seeing all through in the satellite area and in those western parts of the Soviet Union is the disintegration of the monopoly of the Communist Party's own power.

I would not say that the party is going to be destroyed immediately, but their monopoly is being attacked even in Russia today and very much so in Hungary and in Poland. I think this is a very good thing. Let us not jog people's elbows and try to push it faster than it is going. It is going as fast as the situation will bear, and I welcome it. But it is a dangerous thing, too, and we have to watch for its explosive possibilities.

The CHAIRMAN. I would very much concur with you.

In touching on Yugoslavia which you mentioned, basically Yugoslavia really is not a country. Yugo means, as I understand it, all or Pan Slav. It just means all Slavs and some of their people are not Slavs who are in Yugoslavia.

Do you see that country breaking apart or do you think that it will continue although an artificial country to hold itself together?

Ambassador KENNAN. Well, I can only say that if it holds together, it is only because the alternatives are worse, and they may realize that. I have often thought of an example that I once asked a Swiss friend how he could explain the fact that the Swiss were able to manage a multilingual and a multiethnical state as well as they have over the course of these last centuries.

After prolonged thought he replied to me, he said: "You know, I suppose it is because two or three centuries ago we Swiss came to realize that there were no answers to our problems. In other words, that we had to recognize there were problems that could not be answered and with which one had to live."

If that recognition can come over the Yugoslav peoples, that is the best that I could hope. They do not have to love each other. They do not have to stop sniping at each other. That happens in Switzerland, too. They have to realize that you have to live with people you may not particularly like.

The CHAIRMAN. As you point out, life is really a question of alternatives.

I am reminded here of the story of my predecessor, Senator Theodore Green, who was chairman of this committee when he was asked how he—how it felt to be 90, Theodore, and he replied, better than the alternative. So, I think that life is very much a question of alternatives.

Ambassador KENNAN. Yes.

The CHAIRMAN. One final question. What do you think we can do to help the process of perestroika and glasnost along the way? Is it a question of support? Would words of encouragement do more

harm to Gorbachev and his country than silence? What do you think we should do to help the process?

Ambassador KENNAN. I think we should take a restrained attitude in our official comments about what he is doing. This is a matter of internal affairs in Russia, and it is not a good thing for us to get into the argument about it.

On the other hand, I think it would be useful to those efforts of Gorbachev which we approve of if he were able to show a little more response in this country to his forthcoming gestures with regard to arms control.

If he is being criticized today for the unilateral reductions that he has announced and that are now being carried out, if he is being criticized for these, it is partly by people who say "Well, here, you see, you did this as a gesture, and the Americans and the others, the British and the French, have not responded to it at all." There is no change in the communiques put out by the NATO council. There is no modification of the American defense budget or anything like that. Well, I do not mean that we should go to exaggerated or dramatic expressions there of sympathy for him. But I think it would be helpful not only to him personally but to the things we would like to see happen in that country if we could show that efforts of that nature and initiatives of that nature do produce some response from this side.

The CHAIRMAN. Thank you. I thank you very much.

Senator Kassebaum.

Senator KASSEBAUM. Thank you, Mr. Chairman. It is endlessly fascinating to hear Ambassador Kennan and your observations, sir, but it is almost lunchtime, and I hesitate to take any more time. Thank you.

Ambassador KENNAN. Mr. Chairman, may I just say one thing when the rest of you are through, please.

The CHAIRMAN. Yes.

Senator Biden.

Senator BIDEN. As usual, Mr. Ambassador, I am not as gracious as my colleague from Kansas, and my curiosity exceeds my desire to let you go to lunch. And if it is appropriate, I would like to ask a few more questions if I may.

My son is a sophomore at the University of Pennsylvania, and he is writing a paper on you, and so this is to help him.

The fact of the matter is that he called me on Sunday, having no notion that you were going to be here. He has been the son of a Senator for 17 years. Just about from the time he was born, his father has been a Senator. He has met presidents and heads of state, and none of us impressed him very much. But literally when I told him I know you, he said, "You do?" And so this is just to reinforce—since my son is watching—that I do know you. He has seen other things about my career on television like my grades. At least he should see this. [Laughter.]

There are two areas that I would like to explore with you very briefly with the great assistance of John Ritch of the staff. The No. 2 person on the majority staff here rewrote an act passed last year, and it was referred to as the Global Climate Protection Act.

The bottom line of the measure was to try to get some international cooperation in dealing with the environmental problem that is associated with global warming and other problems.

There is a section in the act where we, "urge the President to accord the climate control a higher priority on the agenda of United States-Soviet relations." It says much more.

The point is that I believe, as you do, that this new area of environmental protection—new, in the sense that international consciousness has been raised—has a greater prospect of lending itself to international controls than other efforts. Such as peacekeeping, for example, usually relates to getting a nation to stop doing something internally than preventing it from doing it externally.

I think there is a qualitative difference and thereby environmental protection lends itself more to international regimes in some cases such as Brazil it may be equally as insoluble as conflict. But having said that, do you sense that there is a recognition of the environmental problems that we acknowledge within the Soviet Union, or are they so preoccupied with other matters that it is not a matter that is even considered?

Ambassador KENNAN. No, I think there is an extraordinary degree; and to me, an unexpected degree of recognition of this problem today. There have grown up, as I understand it, voluntary organizations in the thousands in Russia, around the environmental question. That, I would say, is quite extraordinary.

So, I think we do, indeed, have something to build on there.

Might I just say in this respect that when, in 1972, I believe it was, or 1970, they held the first great international conference on environmental problems, I felt at that time, and wrote an article for Foreign Affairs about it, that they could have gone farther than they did at the moment. But they probably had their good reasons for not going farther.

The underdeveloped countries wanted this to be connected with development, and they had to go slowly. And since then they have had this organization in Nairobi, which has been excellently headed, and has done a great deal of useful work.

But, I think it has probably exhausted the possibilities that were given to it in 1972, and this whole question ought now to be looked at again.

When we do it, I hope we invite the Soviet Union to take a very active part in it. And I would hope especially through its own scientific organizations and not just through the government.

Senator BIDEN. I couldn't agree with you more.

If I could switch to Eastern Europe for a moment, as I understood in my absence you had mentioned in response to questions or comments from my colleagues, and I am paraphrasing what I have been told you said, that you hope that Latvia, Estonia, and Lithuania, in particular, move slowly in terms of recapturing some of the basic rights that they feel and I feel, and we all feel, they are entitled to.

And then you made reference to the satellite countries and raised concern about Poland. I came in on the tail end of that.

I am also concerned about what might happen, as you are. You indicated that you think the Soviets, at this stage of their history and development, have moved far enough that it would be very dif-

ficult, at least with Gorbachev in power, for them to physically reimpose their point of view by rolling tanks into Wenceslaus Square, or moving 10 or 12 divisions into Poland.

What do you think they would do absent the physical pressure? Do you think the debate that would take place in the Politburo would be impacted upon if it was clear that the West was not going to move?

Ambassador KENNAN. I think that would be a crucial point with them. I have always wondered whether they would have done what they did in Hungary in 1956 if we had been in a position to assure them that if they would leave the Hungarians alone we would not take them into NATO.

I think the same principle prevails today. If they could be assured that the West is not going to take advantage of their relaxations in Eastern Europe, not take advantage of them for the purpose of undermining their military security, then I think they will put up with a lot on the part of these countries.

But, there are dangers there.

Senator BIDEN. I quite frankly think the single greatest danger that the West faces and that NATO faces—and I think we always face great dangers in times of great change, and great opportunity as well—is that if things move too quickly, the pressure upon Western governments to act, to sustain what appears to be or, in fact, is an uprising of whatever magnitude would be intense.

I think we would renew in this body and in this country the whole question of who lost Eastern Europe. That takes me to this question. As I understand it, Dr. Kissinger has promoted a notion or an idea—and I may be wrong about this, I only know what I have read—to Secretary of State Baker that is not out of line with what you have suggested.

And that is if there is some way we could assure the Soviet Union that in return for significant increases of political and economic freedom in Eastern Europe we would not physically undermine what they view to be their defense bulwark. In this way we might find Eastern Europe moving out from under the heavy hand of dictatorship quicker than if we otherwise were to move.

What is your view of that notion?

Ambassador KENNAN. Well, I think, of course, the aim is a correct one. But, I do not think I would agree with the means that are suggested. I believe that that process of liberalization in Eastern Europe is one that is already proceeding faster than I had dared to hope a few years ago; and that it would not be promoted by trying to make written agreements about this, or formal agreements.

I am sure that all of the members of this committee, as people of distinction in political life, are aware that there are many problems in political affairs which are more easily approached informally than by making formal agreements.

And I think that this, what you have described, is one of those questions. If things were not moving as rapidly as they have been moving, I might agree with Mr. Kissinger about this.

Senator BIDEN. In fairness to Kissinger, I do not know for certain that that is his view. I think that is the view. I am very careful about quoting people also these days.

Ambassador KENNAN. Well, that also is what I understood to be his view. But, I think it would be unwise.

Senator BIDEN. Thank you.

The CHAIRMAN. Senator Moynihan.

Senator MOYNIHAN. Mr. Chairman, I do not want this to end, but I think it is going to. And I believe that Ambassador Kennan wanted to make a, kind of, closing summation, if I heard you, sir.

The CHAIRMAN. But, before that, I think Senator Biden has one more question.

Senator BIDEN. I am sorry for indulging myself like this, but it is so seldom that we have this opportunity. I promise this is the last thing I will ask.

There is a professor, a Sovietologist who on occasion is kind enough to give me the benefit of his insight. You may or may not know him, a young man at Duke University named Professor Hough. He has an interesting point of view, and I just wonder if you would comment on it.

He says that one of the most startling changes that is taking place with Gorbachev is not only the pragmatic realization of how bad his economy is and that change is inevitable. There is something even more fundamental he says.

He said, in 1917, there were really two iron curtains that dropped long before Prime Minister Churchill spoke of them. He said one was an iron curtain to block out the Western model of economic development, and the second was a cultural curtain; that Lenin's intense dislike, intense distrust for Western culture propelled an awful lot of wnat happened.

He said Gorbachev has come along, and again I am paraphrasing, and he is the first Russian leader since Peter the Great who has tried to open up a window to the West not only of an economic level, but on a cultural one as well.

Is that part of Gorbachev's makeup, or is that just purely coincidental to his other agenda?

Ambassador KENNAN. No, I think it is part of his makeup and that he has realized that Russia needs the association with the rest of the world in the cultural and intellectual and spiritual sense, as well as in the economic sense.

I would agree with my friend Jerry Hough in that judgment.

Senator BIDEN. I thank my colleagues and particularly you, Mr. Ambassador.

The CHAIRMAN. Thank you very much.

Senator Simon has joined us, and before your last word, Ambassador Kennan, we would like to hear Senator Simon.

Senator SIMON. And let me yield to Senator Moynihan who has been here.

Senator MOYNIHAN. Oh, I am finished. Thank you.

Senator SIMON. You are.

Well, first I want to apologize to you, Mr. Ambassador. I am between two committee meetings.

When I read what you have to say, I have the feeling that there are few people who understand the sweep of history as you do. And you just have made a tremendous contribution.

I have two very specific questions because I am not sure what my colleagues have asked. One is, a little country that we pay hardly

any attention to, right next to Yugoslavia, where you served as Ambassador, and that is Albania.

Do you have any feel as to what, right now they are just isolated from the rest of the world, what should we be doing about this little country that could bounce almost any way in the future?

Ambassador KENNAN. Yes, they have isolated themselves, I may say; the world did not isolate them. And they have been so uncooperative with everyone who has had anything to do with them that they have put themselves in this position.

They are, I think, almost the last of the unregenerated Stalinist regimes, they, and possibly the Rumanian one. For that reason I think we should avoid doing anything that would give them any political encouragement.

To the extent that they want to open up their country in a proper way to travel by other people, to cultural relations with the West, or even to economic relations, I think we should encourage them, but, be very careful of subscribing to any of their outlooks, their views.

We have to regard them more or less the way we regarded Stalin's Russia many years ago, but not as important.

Senator SIMON. Thank you.

You are one of the, I regret to say, relatively few people in this country who really are experts in the Soviet Union.

We go through a fight periodically here whether to continue Soviet studies programs. Two years ago the Senate Appropriations Committee zeroed out completely the Soviet Studies Program.

I was able on the floor, with the help of my colleagues here and others, to get that back in. But, in terms of the self-interest of the United States, should we be continuing the Soviet Studies Program, and how important is that to us?

Ambassador KENNAN. In my opinion, yes, very definitely. I think it of great importance.

The study of the Soviet Union is not something that fits very well in a natural way with the disciplinary structure of our universities. That is, it does not break down by disciplines as it could. And it requires a certain amount, it seems to me, of official encouragement if we are going to raise up the generation of experts on the Soviet Union which we are going to need.

A good deal has been accomplished, but we have not given to this anywhere near the encouragement which the Soviet Government has given to the study of the United States in the Soviet Union.

I greatly hope that the Federal Government, not only the Federal Government, but other authorities and academic authorities across the country as well, will appreciate the importance of this and will see to it that Soviet studies continue to progress and to flourish.

I would only say this. You know, for many years after the war, these studies lived largely by the authority and the expertise of the great Soviet scholars, the Russian scholars who had been chased out by Stalin and came to this country. We had a whole series of them, really, very great men.

And we have been faced since that time—they have now died out—with the necessity of relying on our own resources to train our own people. This means that you have to keep a lively and vig-

orous movement of scholarship at all levels, from the fellow who starts to study Russian, way up to the senior scholars.

If this structure is interrupted, it is hard to restore it again. So, I think that we have a great stake in the various programs that are in place in the various universities, but also in those institutions, the Kennan Institute is one, the Harriman Institute in New York is another; those institutions which are devoted to research and teaching on the Soviet Union.

I think the Federal Government does have to give encouragement to them.

Senator SIMON. I thank you, Mr. Ambassador.

If I can just add here. We have been fortunate that private foundations have been generous in Soviet studies. But the private foundations are sending us a message: We think this is basically a responsibility of the Federal Government, and the role of foundations is to initiate, but to sustain is a role of the Federal Government.

And it would be shortsighted, indeed, if we were to phase out the kind of support that we now provide.

Ambassador KENNAN. I think that is right. I think the Federal Government is not fitted to carry out all of this instruction and to run these institutions, but it can give support to them.

Senator SIMON. I thank you, Mr. Ambassador.

I thank you, Mr. Chairman.

The CHAIRMAN. I thank you very much. I would just observe that I have tried to get a visa to visit Albania in four different cities over a period of about 8 years and failed.

We are very happy that you have been with us, and would like to give you the last word, Ambassador Kennan.

Ambassador KENNAN. Well, I only wanted to say that I am not only deeply honored and privileged to be able to come before this committee in the way that I have this morning, but it has meant a great deal to me, personally.

The things you are questioning me about, as you know, have been my life. And I will not forget the opportunity that you have given me and the encouragement, not only to myself but to many other great people in the country, by letting me come before you and sound off in the way that I have.

I am sure that some of it is not as wise as it could be, but it is the best I have to offer.

And I thank you.

The CHAIRMAN. Well, we thank you very much. We hope your wisdom will rub off on us and also on the administration. We wish you well and we thank you.

This hearing is adjourned.

[Applause.]

[Whereupon, at 12:15 p.m., the hearing was adjourned, to reconvene at 10 a.m., April 12, 1989.]

HEARING #2
THE GORBACHEV ERA IN PERSPECTIVE: THE END OF IDEOLOGY?

WEDNESDAY, APRIL 12, 1989

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met at 10 a.m. in room SD-419, Dirksen Senate Office Building, Hon. Claiborne Pell (chairman of the committee) and Hon. Daniel Patrick Moynihan presiding.

Present: Senators Pell, Biden, Simon, Moynihan, Helms, Pressler, and Murkowski.

The CHAIRMAN. The committee will come to order.

Today we resume a series of hearings on the future of United States-Soviet relations. At our first hearing last week we heard excellent testimony from Ambassador Kennan. Today we receive testimony from two panels of experts focusing on the significance of and prospects for General Secretary Gorbachev's program of political and economic reform. The formal title of this particular hearing in our series is: "The Gorbachev Era in Perspective: The End of Ideology?"

Our first panel today will consist of Dr. Legvold, director of the Harriman Institute at Columbia University, Dr. Uri Ra'anan, director of the Institute for the Study of Conflict Ideology and Policy at Boston University, Dr. Dimitri Simes, director of the United States-Soviet Program, Carnegie Endowment for International Peace, and Dr. Frederick Starr, president of Oberlin College and well-known expert on the Soviet Union including, I believe the subject of Soviet jazz. I welcome our panel, and I would ask each of the witnesses to take no more than 8 minutes to summarize their views because we have another panel coming on and what is more stimulating for we Senators are the questions and answers and we would like to get to those, too.

Senator Helms.

Senator HELMS. Thank you, Mr. Chairman. You can also infer that we are going to read the statements, but I too join the chairman in welcoming you here because the subject, it scarcely needs to be said, is an important one, and I hope that this hearing can somehow shed some lights on the true nature of the Soviet regime, whatever it is, where the Soviet regime is headed, and the consequences for the national security of the American people.

I think so often about Neville Chamberlain when he came back from Munich proclaiming peace in our time and euphoria gripped

the people of Britain, and there was one guy out of power, out of favor, out of office, who dared to raise questions about it. In fact, he said that Britain and France had to choose between dishonor and war and they chose dishonor and they are going to get war.

So, I think we need in the light of history to be realistic about the nature of the Soviet empire. In fact, it is our responsibility to be realistic. If our national decisions regarding our policy toward the Kremlin are based on illusions, upon ill-informed opinions, upon inferior scholarship, upon disinformation circulated by the media, we cannot hope to preserve this Nation's security for very long.

Is the Soviet Union, in fact, changing under Mr. Gorbachev? I am sure it is, by change does not necessarily imply that the threat posed by the Soviet military power and the threat posed by the global intelligence and subversive apparatus operated by the Kremlin and its allies will diminish one bit.

We can all hope, but we had better have a realistic hope. In fact, I think that Mr. Gorbachev may simply be trying to modernize the Kremlin's dictatorship and to the extent that he is successful, the threat to the free world will obviously increase.

I believe it is obvious to the entire world that those nations held captive within the Soviet empire, including the Russian nation itself would prefer to be free from the shackles of the dictatorship of the Communist Party of the Soviet Union and its allies in the Western banking and industrial circles. So, it seems to me to be an effort at self-deception to pretend that those living under the crushing heel of the Communist Party love Marxist ideology, whether it is of a Leninist or Stalinist or whatever tint.

Over the past several years there have been tens of thousands and even hundreds of thousands of men and women and children in the streets of Estonia and Latvia and Lithuania and Armenia and Georgia and other parts of the Soviet empire protesting the Kremlin's rule and seeking national self-determination. Frankly, there are more true believers of Marxist-Leninism in Manhattan than there are within the Soviet empire.

In any case, I would like to believe that the Soviet empire is in its death throes and that if isolated, it would collapse over the next few decades. But there are those who would advise us to prop up the Kremlin dictatorship through a massive infusion of cheap credit, technology, goods, services, and so forth. And, of course, the taxpayers of the West—and I am most concerned about the American taxpayers—are supposed to assist in the process by guaranteeing private bank credits and commercial transactions as well as by providing for governmental credits and IMF loans and World Bank loans to the Soviet world.

So, what we see happening is the development of national liberation movements in the captive nations of the Soviet empire. And, by the way, Mr. Chairman, the term "captive nation" is no longer fashionable among the sophisticated elite in the West. You do not hear it anymore. But, luckily, the captives in the captive nations do not know that it is unsophisticated to desire freedom.

Some people would have us believe that the nationalities issue should not be pursued by the free world. I say baloney. We are told that the captive nations do not really have a right to self-determi-

nation because that would cause problems for the Kremlin. Unfortunately for that view, however, freedom is very destabilizing amidst tyranny, and in conclusion I find inescapable is that if we truly believe in freedom, we must be prepared to accept the consequences in the long run. The freer the world is, the freer we ourselves will be.

I thank the Chair.

The CHAIRMAN. Thank you very much, Senator Helms. I guess we will go not in order of age or seniority, but alphabetical order today. So, we will start out with Dr. Legvold.

STATEMENT OF DR. ROBERT H. LEGVOLD, DIRECTOR, THE W. AVERELL HARRIMAN INSTITUTE FOR ADVANCED STUDY OF THE SOVIET UNION, COLUMBIA UNIVERSITY, NEW YORK, NY

Dr. LEGVOLD. Mr. Chairman, Senator Biden, Senator Helms, it is an honor to appear before you. I assume the reason for discussing ideology is because most of us entertain the possibility that important changes are taking place in Soviet thinking and we want to know how much.

We are interested, no doubt, because we believe there is some relationship between the way in which Soviet leaders and the elite who surround them think and the way they act. The problem is to measure the scale of the change and how important it may be qualitatively, not merely quantitatively.

I am not going to address the basic problem of the link between Soviet thinking and Soviet behavior. That is a difficult analytical problem. It is one that we as a government and as a people are going to have to wrestle with as the situation unfolds. Nor am I going to address the other issue which is at the heart of the discussion within this country: that is, the question of how durable is the change, how durable is the change in political organization, how durable is the change in Soviet thinking. How durable, therefore, is the change in Soviet external behavior.

One way of trying to get at the scale of change is to dust off this old notion of ideology that we have largely forgotten about in the last 10 or 15 years. Is Gorbachev becoming less ideological or, indeed, is he and the government that he guides ceasing to be ideological? Is that what is happening in the Soviet Union today?

The issue then is whether the concept of ideology helps to understand what is happening. If it does, presumably it helps us because it underscores the point that not merely the content of Soviet thinking is different from ours, but the very structure and character of Soviet thinking. So, the question is not merely whether Soviet ideas are evolving under Gorbachev, but whether their character and structure are changing.

I do not want to become too abstract and, therefore, let me retreat to a concrete illustration. I think a good place to begin is with some of the interviews that Khrushchev used to give to Western newsmen in the late 1950's and early 1960's. Those were interviews intended for a Western audience. Presumably he was attempting to lessen Western fears or, maybe simply to get the West to lower its guard. But in all of these interviews, he would reiterate a set of

assumptions that reflected a basic ideological conditioning and a very different way of thinking.

Khrushchev in those interviews always conveyed a dynamic view of the world with history being on the side of socialism, his society, and capitalism inevitably heading toward eclipse. It was a rigidly black and white view of the world, basically divided into two hostile systems, capitalism blinded by hatred for the Soviet Union and the other socialist countries, and peaceloving. He used to argue that U.S. Presidents would be unable to negotiate disarmament or to accelerate American economic growth because the Rockefellers and the Du Ponts would not let them.

Walter Lippmann, who was one of those interviewers, summarized one of the experiences he had with Khrushchev. He said, "He is a true believer, a true believer in the notion that communism is destined to supplant capitalism, as capitalism supplanted feudalism. For him this is an absolute dogma, and he will tell you that, while he intends to do what he can to assist the inevitable, knowing we will do what we can to oppose the inevitable, what he does and what we will do will not be decisive. Destiny will be realized no matter what men do."

Where did all this come from? Khrushchev behaving this way in his interviews with Western journalists. I think it all starts with the notion that there is a rhythm and a direction to history and that Marx, with Lenin's improvements, unlocked the mystery. To believe that they understand the direction and the rhythm to history already creates a very real difference with the structure and character of the way in which we think. For us history is open ended, with no particular pattern.

It is accompanied by the notion on the Soviet side that they have more than a set of values; have a tool for understanding sociopolitical and economic reality, permitting them to understand more than their place in history, permitting them to grasp the pattern of a continually changing political and economic environment and what their relationship is and should be to the changing pattern.

Again here, too, we are very different. We have no such confidence. By and large we are not interested even in thinking in those terms. We do not seek a purpose in sociopolitical activity, and we do not have a scheme of history.

Is Gorbachev basically different from Khrushchev? Has he or is he escaping from all of this? Is the structure and the character of his beliefs different from his predecessors'?

The answer to that question is "No" on both counts. One of the striking comments made by President Reagan after he first encountered Gorbachev in October 1985 was, "I know actors, and he is no actor. This is man who believes what he says about capitalism. He believes what he says about the military-industrial complex and its role as an impediment on an INF agreement," which is what they were talking about at the time.

In short, while Gorbachev's views of the world may be less simpleminded than Khrushchev's and may be less unshaken, they still trace back to the original assumptions about capitalism, about imperialism, about socialism, about the 1917 revolution and Lenin's purposes in making it.

Does this, however, mean that thinking cannot change on the Soviet side? My answer to that question is also "No." Not only can it change, but it can change in extraordinarily significant ways. And it has historically.

To take one illustration, the notion of revolution itself—Lenin made revolution in 1917 on the assumption that it would be the spark that would generate a European revolution. It would transform international politics. It would do away with international politics. That was wrong, and Lenin signed the Brest-Litovsk peace, joining the game of nations and transforming the basic relationship of the Soviet Union to the outside world.

In the mid-1950's, nuclear weapons intervened and transformed the notion of revolution a second time. Originally, the notion had been that there was a link between war and revolution. Nuclear weapons separated that link and left peaceful coexistence as a basic requirement of Soviet foreign policy.

We have seen further change in the notion of revolution now under Gorbachev, where essentially faith in revolution in the Third World has been lost. In general in virtually every dimension of Soviet foreign policy—and that is what I would focus my comments on a conceptual revolution is taking place today. I have outlined that revolution in the last issue of Foreign Affairs, which I would ask be included in the record.

I would stress how comprehensive this transformation is. That includes everything from the way in which the Soviets think about national security and what the concept means at the close of the 20th century to the basic dynamic of international politics, from the place of the East-West contest in international politics to the importance of interdependence as a force greater than that of class struggle.

This conceptual revolution is reflected in virtually every dimension of Soviet behavior, from their approach to the military competition to their approach to terrorism. In that sense it creates a very real opportunity for us, even if its ideological foundation remains as before.

[The prepared statement of Dr. Legvold follows:]

PREPARED STATEMENT OF ROBERT LEGVOLD

THE REVOLUTION IN SOVIET FOREIGN POLICY

A revolution is under way in Soviet foreign policy greater than any in the postwar period, indeed greater than any since Lenin in the early years of his regime accepted the failure of the pan-European revolution and allowed the Soviet Union to join the game of nations. The current upheaval is on a scale with the other dramatic foreign policy reorientations of the last half-century: comparable to the 1940s when U.S. foreign policy moved from isolation to global engagement; greater, in fact, than the 1950s when French policy passed from the modest aims of the Fourth Republic to the grand enterprises of de Gaulle's Fifth Republic; and greater, too, than the 1960s in Chinese policy, a ten-year transition from a troubled alignment with the Soviet camp to an emerging realignment with the West.

Steadily but chaotically, with a lurching, creative energy, the transformation has cut wider and deeper into the rudiments of Soviet foreign policy. For three and a half years, changes have accumulated, spreading from one sphere to the next, altering not merely the workaday calculations that trapped Mikhail Gorbachev's predecessors in their Afghan imbroglio and in their leaden approach to the Euromissile challenge, but altering the assumptions by which the Soviets explain the functioning of international politics and from which they derive the concepts underlying the deeper pattern of their actions. Revolutions of this kind do not make states into saints nor do they remove them as preoccupations in the policies of other nations, but they do leave a vastly different challenge. Once understood by the outside world, such revolutions create new imperatives and often new opportunities.

Why now? Why, when only a few years ago Soviet policy seemed so menacing in its rigidity? A part of the answer lies in

---

Robert Legvold is director of the W. Averell Harriman Institute of the Advanced Study of the Soviet Union, and professor of political science at Columbia University.

the fact that radical circumstance often stirs radical change, and the Soviet circumstance these days is surely radical. Rarely, if ever, has a leadership under the duress of a basic failure of its system attempted so much. It would be difficult to do what Gorbachev wants to do to the Soviet economic and political order and not also affect the foreign policy order, to focus on massive problems in one sphere and ignore those in another, to turn society upside down but leave the external stakes of the country untouched, or to reexamine the entire Stalinist experience but give no thought to the lessons of the last twenty years in foreign affairs.

When a foreign policy has diminished national welfare and weakened the state's ability to influence or control external change, as so many Soviet spokesmen now freely admit has been true of Soviet policy, the price of not responding mounts. Moreover, no country, least of all a superpower such as the Soviet Union, can disregard the constraints and requirements of a changing international environment, one less and less amenable to old formulas and presumptions. In the Soviet case, intellectuals and various parts of the foreign policy establishment have known this for some time, and over the last decade they have slowly created the foundation of a substantially different Soviet approach to international politics. When all these influences converge, especially in the presence of a leader like Gorbachev, great, even revolutionary, departures come more naturally.

Revolution is not a word to be used lightly. To qualify, change must be of historic proportions. It would not be enough for the Soviet leadership to alter its actions in this or that respect, even if some of those shifts represented important breaks with the past. Even far-reaching modifications in strategy would be insufficient.

What must change is thinking. Real revolutions are, ultimately, conceptual. Unless the national leadership's understanding of the realities of the world undergoes a modification, no initiative, no matter how surprising, carries sufficient depth or conviction. Therefore, to assume that only deeds, and not words, count, as cautious Western audiences have so often done in reacting to Gorbachev, ignores what deeds owe to words, when words represent the concepts by which leaders come to terms with reality. Before behavioral revolutions come conceptual revolutions.

II

Since Gorbachev came to power in March 1985, Soviet ideas about international politics and how the Soviet Union should perform as a superpower have been in constant flux. No aspect of policy, no dimension of the intellectual underpinning of policy, remains untouched. In the process the tumult has slowly engulfed the whole of policy, from the mechanisms of its formulation to the core assumption on which it rests. Indeed, the sheer sweep of the drama is what should have first caught our eye.

There is, however, a good deal more. What gives such power to the conceptual revolution currently under way is its appearance on three different and critically linked levels. Change at any one level would be important enough. Take, for example, change in what might be called *basic concepts*, or the key notions by which the Soviet leaders and foreign policy elites make sense of the opportunities and problems posed for them by the world outside. These have not been so thoroughly reconsidered for more than sixty years—not since the wrenching adaptations to the Treaty of Brest Litovsk, the civil war and the Rapallo accords. Literally every dimension of Soviet policy is being touched.

First, Gorbachev has radically altered the Soviet concept of national security, or, at least, the framework within which it is discussed. He has raised the most fundamental questions: What constitutes national security in these waning years of the twentieth century? How is a superpower like the Soviet Union to pursue it without becoming its own worst enemy? His answer, boiled down to its two essential parts, stresses, as the answer of no Soviet leader has before, (1) the insufficiency of military power as the way to national security, and (2) the link between national and mutual security.

As early as the 27th Party Congress in February 1986, Gorbachev began to convey an unusually complex appreciation of what constitutes national security. The military dimension, he has since said over and over, is but one aspect of the problem—almost certainly not the main one. It is not merely, to use his words from the party congress, that "the character of contemporary weapons leaves no country with any hope of safeguarding itself solely with military and technical means, for example by building up a defense system, even the most powerful one." More to the point, in the present era, according to

Gorbachev, most threats to national well-being are not military but economic and political—and the possession of military power, let alone its use, provides little or no solution to these threats.

The second theme emerged in the fall and winter of 1985. After that year's Geneva summit Gorbachev went out of his way to emphasize his "deep conviction" that, were the United States to possess less security than the Soviet Union, only bad could come of it, because inevitably only mistrust and greater instability would follow. No nation's security, he has repeated often since, can be achieved at the expense of another country. Thus national security cannot be divorced from mutual security. "To think otherwise," he said in August 1986, "is to live in a world of illusions, in a world of self-deception."

Of still greater significance, Gorbachev has also helped to reorder a second basic concept. From Lenin's day it has been an article of Soviet faith that the struggle between two social systems, capitalism and socialism, creates the core dynamic of international politics. The notion is not simply hollow cant. What the Soviets have thought about the possibilities of East-West relations and what they have felt obliged to do for Third World revolutions derive from it.

No longer, say Gorbachev and the many who take their cue from him. Not the struggle between classes but the common plight of man forms the central imperative. Not a Manichaean contest between good and evil, but the entangling effect of interdependence, holds the upper hand. Aleksandr Yakovlev, Gorbachev's alter ego in the Politburo, spoke last August of a "planet compressed to an unprecedentedly small size," a world whose history can end with "the touch of a button," a world in which "any event becomes the property of five billion people within hours," a world needing not the primacy of "individual countries or classes, people, or social groups," but ways of countering "the forces of separation, of opposition, of confrontation, and of war, which have already delayed the development of civilization by whole centuries."[1] The Soviet foreign minister, Eduard Shevardnadze, third among the most powerful Soviet foreign policy figures, views as "anti-Leninist" the Khrushchev-Brezhnev thesis of peaceful coexistence as a specific form of class struggle.

[1] From *Vremya* broadcast, Aug. 12, 1988, as reported in *Foreign Broadcast Information Service*, Aug. 16, p. 52.

The third change concerns the place of the Third World in international politics, and of the superpowers in the Third World. Soviet thinking in this respect no longer resembles what prevailed in the pre-Gorbachev era. Hardly anyone pretends any longer that the woes and turmoil in Asia, Africa, the Middle East and Latin America are part of some grand, heroic "national liberation struggle," once the excuse for Soviet commitments and intrusions. Instead, Third World conflicts are portrayed more as a vast drain on the pitiful resources of developing countries and a "catalyst to local and international tensions."[2] Or, as Gorbachev proclaimed in his speech before the U.N. General Assembly this past December: "The bell of every regional conflict tolls for all of us." There is a corollary: not so long ago Soviet leaders and elites treated their own country's role in the Third World imperiously (beyond reproach and none of the United States' business); now they agree that any future agenda of détente with the Americans must set limits to superpower intervention.

Finally, the concepts by which Soviet leaders order their relations within the world of socialism—with Eastern Europe, China and nonruling communist parties—are no less in flux. Considering the importance and scope of the conceptual categories already discussed, to add this fourth one is to say that no piece of the foundation of Soviet foreign policy remains unaffected.

From the late 1940s, when Stalin made over Eastern Europe in his own image, according to the Soviet catechism, the socialist world has been a universe unto itself: Soviet leaders have refused to admit that within it relations could be anything other than harmonious, built as they were on the "general laws" (or imperatives) of socialist development, laws validated first and foremost by the Soviet model. Assuming a natural, even preordained, unity, Soviet leaders and their proconsuls in Eastern Europe presumed not merely a need, but a right to discipline any serious deviation from it.

Under Gorbachev, the catechism has changed. Those who reflect deeply on the power of the Soviet Union in its relations with Eastern Europe (and, in the long run, in Sino-Soviet relations), including Gorbachev, Yakovlev and Shevardnadze, now acknowledge that socialist international relations are no

[2] A. Kislov, in the journal *Mirovaya ekonomika i mezhdunarodnye otnosheniya*, August 1988, p. 39.

different from those of any other type of polity. They are as prone to conflicts, including armed engagements arising from self-interest and ambition, as are relations among and with other systems. In light of this, Soviet leaders now ask: Why pretend, let alone demand, that a "single truth," a single shared wisdom, should prevail within what until recently was called the socialist commonwealth?

III

The revolution in Soviet foreign policy is occurring on yet another level, where notions more directly inform practical choice, the level of *policy concepts*. The change is stunning and portentous. If Soviet leaders are rethinking the very notion of national security, they are also revising the concepts that guide their defense decisions and their negotiating posture in arms control settings. Three new ideas form the core of this transformation.

The first is the notion of "reasonable sufficiency," an idea Gorbachev himself first introduced at the 27th Party Congress in 1986. By these words, he and other nonmilitary commentators mean something less than parity, not to mention superiority. In simple terms, they are advocating that the Soviet Union cope with, rather than keep up with, the Joneses. Rather than imitate every new U.S. program, such as the Strategic Defense Initiative, it would be better, in their view, if the Soviet Union were to take the cheaper and simpler route of developing means of foiling the weapons the Americans field. And rather than match the capabilities of each and every country whose arms could threaten the Soviet Union, they would ask of Soviet defenses only that they meet threats that might be plausibly imagined.

Gorbachev has not provided specifics, doubtless because he does not yet have them in mind. But others, beginning with his foreign minister, are filling in the blanks, and their thoughts have far-reaching implications for the Soviet approach to the military competition with the West.[3] In the strategic nuclear realm "reasonable sufficiency" would end the quest for a Soviet arsenal designed to overmatch the United States at every rung up the ladder of nuclear escalation—including, in the end, a force designed to devastate the nuclear arms of the other side—

[3] A particularly compelling example is Aleksei Arbatov, "Parity and Reasonable Sufficiency," *International Affairs*, October 1988, pp. 75–87.

and replace it with a secure retaliatory force capable of ensuring some essential but minimal level of deterrence. In conventional arms the concept would leave the Soviet Union with forces capable of defending against a surprise attack but not of launching one or, more important, of conducting a large-scale, extended offensive. As for Soviet military power usable at great remove, according to the new doctrine there should be enough to help discourage outside interference in local crises, but not to make revolutions or save clients too feeble to defend themselves.

The other two ideas are strategic stability and defensive defense, the latter with its corollary of asymmetrical arms reductions. Strategic stability incorporates the technical, and narrower, American notion of crisis stability (namely, a structured nuclear balance that reduces the temptation for hair-trigger response in crisis situations) but goes much further. For more than a year, Soviet experts working on the problem have struggled to imagine a more stable nuclear regime at drastically reduced levels of armament, one that takes into account not merely the characteristics of weapons systems, but also the effects of strategic doctrine and even of political context.

Defensive defense embodies the simple idea that in no sphere of military power, conventional or nuclear, should either side be able to launch and maintain a vast frontal offensive. The idea is simple; figuring out how to achieve it is another matter. Gorbachev, however, in summer 1986 did introduce a new, albeit vague, guideline for proceeding, one that has since become a standard Soviet formula: let the side with an edge be the one to sacrifice more in order to create a more stable balance at lower levels.

The knowledgeable reader is no doubt protesting: "But these notions have not been embraced by much of the Soviet professional military—and is that not a complication of some consequence?" Indeed it is, yet not one to be overestimated. First, to say that the military by and large does not use the same concepts is not to say they have consciously chosen against them. Second, where their preferences are clearly in conflict with the new ideas, that is not to say they will fight to have their way. And, third, in those instances where they do choose to fight, this is not to say that they will win, given their current comparative political disadvantage.

Other new policy concepts parallel Gorbachev's reformulated insight into the basic dynamic of contemporary interna-

tional politics, an insight that exalts interdependence and devalues class struggle. Reduced to their essence, these concepts stress multilateralism in place of great-power unilateralism and substitute responsibility of the many for the arrogated duty of the two superpowers. This in turn means strengthening international institutions, such as the United Nations, to give them a larger role with all manner of tasks, from facilitating communication during crises to providing aid in environmental emergencies, from managing regional violence to policing the fragile settlements by which such violence is ended. However, it also means altering Soviet institutions and practices that make the U.S.S.R. an unfit participant in other international institutions, such as the General Agreement on Tariffs and Trade (GATT) and the International Monetary Fund.

The Soviet leadership has not been as successful at developing policy concepts to go along with shifts in its thinking about the place of the Third World in international politics. Since late summer 1987 Soviet speakers have begun favoring political over military settlements and suggesting the notion of "national reconciliation" as the way out of the chaos in places like Afghanistan, Angola and Cambodia—and this might be taken as a new policy concept. But it may only represent a recoiling from the ardors of these particular entanglements, rather than a more durable new approach to regional instability as such. In the last year or so, however, Soviet academics have urged that the United States, the Soviet Union and other great powers begin designing an explicit code of conduct regulating their intrusions in the Third World. The outlines of such a code remain foggy and, at times, distinctly prejudicial to the far-flung basing of U.S. military power.

Of the transformations in basic concepts, the gravest and most traumatic is the process of rethinking Soviet relations within the socialist world, particularly with Eastern Europe. Not surprisingly, therefore, Soviet leaders are not having an easy time generating concrete concepts to guide policy in this area. Two departures, however, have enormous implications. First, the old notion of "socialist internationalism," for decades a euphemism for Soviet tutelage, has been replaced by something far closer to laissez-faire. East European regimes are to be left essentially alone to solve their own problems and make their own mistakes. Second, the Brezhnev Doctrine, while not actually lifted, no longer sets the same limits to change. Put differently, doubtless there are still circumstances in which the

Soviet Union would intervene with force, but they would probably not include those of 1968 and 1981.

In sum, we are witnessing significant changes in basic concepts and operational policy. What makes all of these changes on the two levels still more momentous, however, is the passage occurring on a third level.

To a degree particularly difficult for Americans to understand, *fundamental assumptions*, on which the entire edifice of Soviet foreign policy beliefs ultimately rests, are at stake. Never, not even in the 1940s or as a result of the Vietnam War, have Americans been forced to reexamine the basic premises of their worldview. In the Soviet Union, today, people are engaging in such a reexamination. No two matters are more fundamental to the Soviet mind than revolution and capitalism, and the view of each has come to a remarkable pass.

Twice before, the Soviet conception of revolution has undergone profound change. The first time was in the years following 1917, when Lenin's rationalization of the Russian Revolution as the "spark" for a European revolution died, and Soviet leaders were left to fend for themselves. The second time was in the 1950s, when the advent of the nuclear era forced them to rethink the relationship between war and revolution, and, therefore, accept the argument for peaceful coexistence.

Now comes a third transformation: the end of revolutionary faith. Its last repository had been the Third World, but nothing any longer convinces most Soviet observers that revolution is the probable fate of most developing countries (not, at least, the kind of revolution that they would wish to see); more likely their fate is either political vagrancy or, for those that escape into the ranks of the newly industrializing countries, something more akin to capitalism.

Capitalism, too, is coming to represent something vastly different for Gorbachev and his supporters. They are more attentive to the durability of capitalism, as the twentieth century draws to a close, than to its predicted doom. More of their sensitivity is concentrated on its dynamism than on its crises, a dynamism that some openly, others by implication, acknowledge has shamed socialism. For capitalism has successfully made the transition from the industrial to the technical-information age, while socialism has yet to prove that it can—an admission that one finds in Soviet journals these days. (Hence, not so incidentally, the "crisis" of communist parties in the West, to put it as Soviet commentators now do.) And the discovery that

certain ills, such as militarism, are not in fact intrinsic to capitalism engages more attention now than do the features which the Soviets continue to regard as capitalism's flaws.

When Gorbachev can come to New York and deliver a speech in praise of tolerance and diversity and "the universal human idea," raise the revolution of 1789 to equality with that of 1917 as a source of "a most precious spiritual heritage," identify "freedom of choice" as "a universal principle that should allow for no exceptions," reject force or the threat of its use as an instrument of policy, and call for a more open international order, he may risk being "a little too romantic"—and Gorbachev has acknowledged that some of his own people think he is. But his words should not be regarded as mere bluster. Not when values, assumptions and prescriptions are being recast at every turn, at every level, in every dimension of policy.

IV

Is the revolution in Soviet foreign policy really so radical? What evidence might be offered to the skeptic? The evidence is threefold: first, the nature of the process Gorbachev has set in motion; second, the opposition to it; and, third, the actions accompanying the process.

First, what is the nature of the process? It seems reasonable to suspect that something so comprehensive cannot be easily scripted by one oligarch—or even by a score. When literally every dimension of policy is affected, an invisible, not a human, hand is at work. What is more important, the process has been from the start unsystematic in its essence, far too much so to be simply a clever contrivance. In a less natural process, the progression would be more logical: first, the affectation of a shift in fundamental assumptions, then the supposed adjustment of basic concepts, and from these an appropriately modified array of policy concepts.

But that is not at all what has been happening. On the contrary, change has come piecemeal and out of any logical order. It has tumbled forth on all levels at once. The process has been like some great random sewing machine, stitching back and forth, slowly exposing the pattern. Gorbachev starts by acknowledging, at last, the interconnection of national and mutual security, or maybe simply by coming forward with a new negotiating position in the Strategic Arms Reduction Talks (START), or maybe by vaguely suggesting a new standard for

defense, which he calls reasonable sufficiency, all of which did happen between October 1985 and February 1986. Others then seize the opening and push the argument forward, taking a notion like reasonable sufficiency and spelling it out, adding as well other logically related new ideas, such as strategic stability or defensive defense. Within months these accumulating notions make their way back into the next Gorbachev or Shevardnadze pronouncement.

Meanwhile, each part of the establishment—the policy leaders in a vague and sweeping fashion, the policy intellectuals in a more elaborate and specific fashion—attacks one issue, only to find itself led to another still more fundamental conclusion. Thus, someone sets out to elaborate an idea, say the notion of "reasonable sufficiency." He then begins to question the role of military power in Soviet policy and finally to admit, as did Americanologist Georgi Arbatov, that "in the past we did not realize, as we realize now, the limited possibilities of the use of military power"; as a result "our national security policy overemphasized military means."[4] Such questioning of the place of military power in Soviet foreign policy prompts others to challenge the whole Soviet concept of what threatens the U.S.S.R., a question that began to emerge in academic articles by early 1988 and now threads its way through leadership speeches.

We were wrong, these Soviet policymakers say, to conceive of the threat in thoroughly military terms, to represent the military threat as one of war, and to imagine the war would likely break out in central Europe. In fact, they argue, the real threat has increasingly become the deformation of the Soviet economy produced by a preoccupation with military power, a debilitating order of priorities consciously imposed on the Soviet Union by a richer West. Indeed, they ask, how is it that Soviet military power grew throughout the 1970s, while Soviet national security, when thought of in terms of the country's economic, social and political stability, shrank?

The process continues. It is not enough to stop with a rethinking of the nature of the threat, a growing number of Soviet leaders contend; the need is to grapple with the larger question of where Soviet national interests lie. Shevardnadze referred explicitly to this problem in an important address to a foreign ministry conference last July, and since then a number

[4] "Perestroika, Glasnost and Foreign Policy," unpublished paper, 1988.

of writers have offered bold responses.[5] Their common theme is that the mindless willingness to make commitments in the past, the reflexive jockeying for international position and the struggle for spheres of influence scarcely corresponded to the nation's real national interests. They urge instead that foreign policy be corralled and made to serve the interests of society, not a disembodied "bureaucratic internationalism," as one of them puts it.

Although paradoxical, a second reason to take the process seriously is the opposition to it, or at least to certain aspects of it. (Of course, opposition is also a reason to fear for the future of the process.) When Yegor Ligachev, thought to be the second-ranking member of the Soviet Politburo until recently, argues on behalf of a class-based view of international politics and defends the notion of class struggle, as he did last summer, it is a reasonable deduction that he regards the new ideas as more than an artifice.

But, if the misgivings of more traditional minds give us further reason to believe something real is afoot, are they not also reason to avoid overrating its chances of success? If there is indeed a struggle under way, who is to say the architects of the new concepts will prevail? In the abstract this is a perfectly prudent concern. In reality, it gravely miscalculates the current state of affairs.

Gorbachev, Yakovlev and the others are *not* locked in a furious battle with critics of their foreign policy program. Ligachev obviously worries about the potential loss of self-identity and ballast when old and familiar ideological frameworks are abandoned. But to compare the 28 lines in one of his speeches with a virtual avalanche of pent-up new ideas seems less than judicious. Conservative skepticism over what is being said and done by Gorbachev in foreign policy certainly must exist but, to keep matters in proportion, one has to look long and hard to find traces of it in the public record, quite unlike the case with criticism of his domestic reforms. Moreover, with the important exception of the military, when we consider the ranks of those who make or influence Soviet foreign policy—whether the dominant figures in the foreign ministry or the international apparat of the party, the personal advisers to key Politburo members, senior figures in the media

[5] For one of the boldest, see Igor Malashenko, "Ideals and Interests," *New Times*, November 1988, pp. 26–28.

or the most powerful personalities within the Academy of Sciences—an overwhelming proportion are part of the revolution, not a threat to it.

Finally, Soviet actions over the last three years, particularly in the last year and a half, suggest that the churning in Soviet minds is genuine. Some of the evidence lies in a wide range of what might be called symptomatic behavior. Releasing Andrei Sakharov from internal exile in Gorky in December 1986 was an early illustration. Paying long-owed obligations for U.N. peacekeeping operations in May 1988 was another. Handling the hijacking of a Soviet cargo aircraft in November 1988 as Washington itself might have was a third. This behavior is symptomatic because, while none of these actions is crucial, taken together they represent something qualitatively different from the Soviet Union's past demeanor.

By now the list is long: the end to the jamming of foreign broadcasting; the bid for observer status in GATT, the Asian Development Bank and the Pacific Economic Cooperation Council; collaboration with British law-enforcement agencies against drug trafficking; cooperation with the International Atomic Energy Agency investigating the Chernobyl disaster; the vote in favor of keeping Israel and South Africa in that agency; the creation of a commission to examine the so-called blank spots in Polish-Soviet history—and so the list swells. It is already too long and too diverse to be only a nondescript series of random occurrences.

The same can be said of Soviet actions in areas that truly count. For a long time after Gorbachev came to power, skeptics had a point when they reminded audiences that the deeds of the Soviets were less inspiring than their words. But this case is harder and harder to make. The agreement to eliminate intermediate-range nuclear forces (INF), largely on NATO's terms, could be explained as a hard-headed, albeit courageous, corrective to a politically and materially expensive mistake. So could the decision to withdraw from Afghanistan. One realizes, however, that even these decisions carry more profound implications. Leaving an agony like Afghanistan by cutting and running, as others like the French and Americans know too well, sets limits to future interventions. Making a deal with the West on INF involving the destruction of a whole generation of modern weapons (without the destruction of the threat for which they were designed) and allowing the most intrusive forms of verification is an impingement on defense decision-

making such as has not been allowed under any Soviet leader since Khrushchev.

From the start, there have also been other actions that broke more clearly with the past. One such action was the decision in October 1985 to offer 50-percent reductions in strategic nuclear forces, including subceilings that could greatly lessen the Soviet threat to U.S. fixed land-based missiles (at one time the essence of the American fear of a "window of vulnerability"). The acceptance of on-site verification in the INF agreement is another. A third is the effort to address China's three "obstacles" to better Sino-Soviet relations by initiative rather than rhetoric, including since late 1987 the active cajoling of Vietnam to pull its troops out of Cambodia.

In December 1988 in New York came a fourth break—one which almost no one was prepared to pass over. A unilateral decision to cut Soviet active military forces by 500,000 troops, or almost 15 percent, and to withdraw more than 40 percent of Soviet tank divisions from Eastern Europe, together with 50 percent of Soviet tanks, is a giant shift in the Soviet approach. Only some very basic adjustment of Soviet thinking can explain it. If, in fact, a less-publicized but more significant pledge in the Gorbachev speech comes about, a very real revolution in behavior will have occurred. "All Soviet divisions remaining, for the time being, on the territory of our allies are being reorganized," he said. "Their structure will be different from what it is now; after a major cutback of their tanks it will become clearly defensive."

V

What is the West to do? How are we to cope with one of the great foreign policy reorientations of our times?

The answer, in most capitals, is "cautiously." The reason, even for those who take Gorbachev at his word, has ultimately to do with another kind of uncertainty. What if it all ends tomorrow? What if Gorbachev disappears—or, if he survives, what if the pressure of circumstance causes him to retreat? Most counsel: "Take hope from the change, but don't lower your guard, don't overestimate the new, and don't count on the future."

This time, however, caution is the enemy of the sensible. The problem arises from a misreading of the sources of the transformation taking place in Soviet foreign policy. Most take it for granted that what is happening is owed entirely or largely

to the Soviet crisis at home or, at a minimum, to the way Gorbachev sees the crisis. It follows that, should the Soviet predicament worsen (or, less likely, ease) or should Gorbachev be replaced by someone who takes a different view of it, the same impulse to change will no longer exist.

Unquestionably the Soviet leadership's domestic preoccupations are a major factor. Gorbachev says so in every foreign policy speech. At the April 1985 Central Committee plenum and often since, he has made it plain that his domestic agenda dictates everything else and that foreign policy will comply with its needs. Those at the forefront of the new thinking freely admit that, but for the domestic drama, the changes they care about would not be coming so rapidly and dramatically. Almost certainly there is another connection: when Gorbachev and the others engage in soaring thoughts about change within the Soviet Union, presumably they find it easier and more natural to entertain great conceptual leaps in the foreign policy realm as well.

Important though the domestic factor is, however, it does not alone, or perhaps even primarily, account for the revolution under way in this other context. The requirements of the international setting also play a role. The truth is that virtually every dimension of the change has antecedents in the period before Gorbachev, because the realities of international politics have for more than a decade been forcing Soviet foreign policy elites to rethink many of their assumptions. Quite apart from the trouble at home, they understand the need to reconsider the problems of managing alliances, of using force, of achieving influence and of making commitments. It is the world outside, not the mess inside, that has led them to think through the character and weaknesses of their power abroad, the hazards of interventionism, the causes of insecurity, the significance of interdependence and the costs of autarky. Whatever happens to Gorbachev or to his effort at perestroika, the same pressures will be there. He has most assuredly accelerated and deepened the process of adjusting, and his passing would slow its momentum—but not end it. The conceptual revolution I have been describing can be undone only by leaders who plan to disregard powerful and unforgiving realities (and the failures of past policy).

No one should conclude from all this that the Soviet Union will soon cease to be a concern of U.S. policy. Talk of what it will do to the United States and the Western alliance to lose

the Soviet Union as an enemy is wildly premature. Nothing in what I have laid out implies that the Soviet Union will soon embrace Western ways, forswear great ambitions abroad or cease to be a military superpower. Nothing guarantees that Soviet leaders will never again offend the West by the use of force at home or in Eastern Europe, or worry it by their involvements far from their own borders.

But a historic opportunity now presents itself to the United States and its allies, and neither timidity nor old ways of framing the issue are the right response. It is fashionable these days to say the cold war is over and the West has won. What many people do not realize is that we in the West are in danger of ending it on Soviet terms. For it would end on Soviet terms if Moscow finally established itself in the eyes of the world, including those of our own people, as the leadership with the greater vision and the more compelling foreign policy values, as the leadership more willing to run risks for a safer and less militarized international order, as the leadership more committed to strong and effective international institutions, and as the leadership more ready to free us from the contests of the past.

Thus, when NATO, after a great deal of debate, puts forward a proposal by which the Soviet Union does all the cutting of conventional forces while we only watch, a proposal in which the objective is to relieve Western concerns and defer Eastern concerns, and when the first instinct of prominent Western public figures faced with Gorbachev's pledge of unilateral arms reductions is hand-wringing over the impediments it will put on efforts to modernize NATO's tactical nuclear weapons, then the West is doubly foolish: first, for not understanding the opportunity now open to it; and second, for casting itself in the eyes of the rest of the world as the hidebound.

Not so many years ago many commentators located the root of the Soviet challenge in the Russian quest for absolute security. Maybe it is now the West that is more in danger of calculating excessively the margin of security, not daring to run risks in the uncertain hope of creating far greater stability and safety.

The West makes some of the same mistakes when it underestimates or, worse, dismisses Gorbachev's new emphasis on multilateralism. If by his statement and the accompanying array of proposals he is telling the West of his country's readiness to diminish the role of both superpowers in supervising interna-

tional politics and to transfer to others many of the rights and duties seized by these two over the last forty years, it is not in the West's interest to turn a blind eye. What gain is there for the United States and other Western powers to be seen as cynical toward the United Nations and other international institutions with a political contribution to make, while the Soviet Union moves in the other direction?

As the new Soviet leadership has begun to stir interest in the West, the closest thing we have had to statesmanship is the urging that we "test" Gorbachev, by which is meant that we take him seriously and probe to see how far he is willing to alter Soviet policy. It seems increasingly irrelevant advice, as Gorbachev meets more and more tests we have not yet collected ourselves to pose. Increasingly the test is for the West: Do we have the imagination, creativity and courage to respond to the very revolution in Soviet foreign policy for which we have waited half a century?

The CHAIRMAN. Thank you very much.
Dr. Ra'anan.

STATEMENT OF PROF. URI RA'ANAN, DIRECTOR, INSTITUTE FOR THE STUDY OF CONFLICT IDEOLOGY AND POLICY, BOSTON, MA

Prof. RA'ANAN. Thank you, Mr. Chairman, Senator Biden, Senator Helms, Senator Murkowski. I thank the committee for inviting me. My topic today will focus entirely upon one issue, and that is the nationality issue within the Soviet state and its implications for the future.

Long before the Gorbachev era gave high visibility to ethnic dissonance and to centrifugal tendencies, as items that demand top billing on the agenda of the Soviet leadership, the significance of this conflict element ought to have been apparent.

Yet, the current Soviet leaders, despite tentative references to the nationalities problem in 1986 and sporadically since then, have evaded any serious sustained effort to address this issue conceptually or operationally. A party Central Committee plenum on this question has been postponed time and again and is now scheduled only for this summer.

It is impossible for Soviet leaders to escape the implications of this problem, however, because many of the factional conflicts revolve around the question of individuals and their nationality, the latter being one of the very first questions asked when someone is proposed for promotion.

As for the personal tendencies——

Senator BIDEN. I am sorry, you said when proposed for promotion?

Prof. RA'ANAN. Also for demotion, of course.

To the extent that we have noted preferences on the part of individual Soviet leaders as far as the nationality issue is concerned,

Ligachev and Chebrikov, who now has oversight responsibility over the KGB and the Ministry of the Interior, have been clearly in favor of a stronger centralist approach with minimum autonomy for the other non-Russian nationalities.

Gorbachev has been ambivalent and sometimes has shown empathy for the strivings and aspirations of the non-Russians, interspersed with flashes of anger, particularly against the Armenians. And, in that case, in part because of a wounded ego when visited Armenia, he went so far as to dissolve and arrest the members of the Nagorno-Karabakh committee. They are still imprisoned without charge or trial.

The constitutional amendments which Gorbachev submitted in October 1988 strangely enough curtail still further the paper guarantees that the Brezhnev and even the Stalin constitution had given to the various union republics. After major protests, particularly from the Baltic peoples, he dropped some of his amendments, but the final package still, if anything, reduced rather than enhanced local autonomy.

There are some generic factors which are at the core of the exacerbation of the Soviet nationalities' problem, and those concern not only a conflict between Russians and others, but also a conflict between various non-Russian peoples.

Now, until 2 years ago that problem could be subsumed primarily under the heading of human rights—freedom of movement for individuals and so on. Now, it has become a territorial problem; that is, it is largely a conflict over who will control which territory.

The nationalities at the periphery of the Soviet Union are demanding each that their indigenous language become the official language of their republic, that they be given genuine roles in governing their own territory, and that the inflow of Russian colonists be stopped.

That is not only a question of individual republics, however. Between 55 and 60 million Soviet citizens live in areas other than "their own territorial district," or have none as is the case with Poles, Germans, Jews, et cetera. Almost one-half of that number are Russians who have moved outside their own republic and into the Baltic republics, the Black Sea ports of the Ukraine, and Central Asia, and they are regarded generally as colonizers by the indigenous peoples.

At the same time as spreading geographically across the Soviet Union, however, paradoxically Russians are rapidly becoming a minority of the total Soviet population. You have geographical expansion and demographic decline. The result is that you have not only a backlash against Russian colonization from the non-Russians, you have Russian anxiety complexes, at times paranoia, about between displaced as the ruling nation of the Soviet state.

The result has been the creation of some very sinister organizations under the cover of glasnost, the most notorious of which is a movement widely known by now as Pamyat which means "memory." It is a chauvinistic and anti-Semitic organization which at one and the same time talks about the "great old days of Stalin" and the "great old days of the tsar" as well. And it is strange to what extent it has been tolerated, particularly in Leningrad.

But to show you how misleading labels can be, the Moscow godfather of this organization was actually the same Mr. Boris Yeltsin, who is now widely hailed as a "reformer." He was the very first Soviet leader to receive one of their delegations and to treat it particularly well. So, labels are misleading in the East as they are sometimes in the West also.

Now, Pamyat can be very useful as an energizer of the Russian minorities that are now living in places like Riga and parts of the Estonian Republic and who feel that they are "discriminated against" because they never bothered to learn the local language. But the indigenous peoples have demanded that their native tongue become the official language of their particular republic. The indigenous people, of course, are bilingual. Russians never bothered to learn the indigenous language.

So, now, in almost every republic you have an autonomist, so-called popular front springing up, which is opposed by a Russian national organization known as the "internationalist movement," rather quaintly I think. Pamyat has played a part in energizing these Russian countermovements who say "We do not want antonomy for these republics. We want strong central rule for Moscow."

There is also some indication, however, that it is not only these informal organizations of Russians who are behind the so-called internationalist movement, but apparently KGB organization as well. This is being done very deliberately, putting into place, I believe, some of the components for suppression of the autonomist movements—a repression which appears to be beginning if we take only the Georgian case of recent days.

Side by side with the so-called internationalist movement you have a more ominous development. The Ministry of the Interior some months ago was given a paramilitary arm, the so-called special detachments, also known as the Black Berets. The regulations that were published concerning their field of action included the right to open fire on demonstrators and permission to implement search and seizure in private apartments.

So, you have a potential repressive force including the internationalist movement, the Black Berets, and some regular army units, although on the whole the regime is reluctant to use the Red Army, which has become increasingly a "Muslim army"—most of the recruits drafted in the last 2 or 3 years have come from the so-called Muslim peoples. So, the prefer to use this new arm of the Ministry of the Interior because the normal police in the various republics has been infiltrated by the local nationalist movements.

Now, clearly the party apparatus is no longer adequate for this repressive purpose because in Lithuania, for instance, the local party has collaborated with the local national autonomist movement. The result is you can no longer use the party leadership in Lithuania in order to suppress the Lithuanian movement.

Thank you.

[The prepared statement of Professor Ra'anan follows:]

PREPARED STATEMENT OF URI RA'ANAN

The significance of ethnic dissonance as a conflict element in the Soviet state, fueling centrifugal tendencies, ought to have been apparent long before the advent of the Gorbachev era gave high visibility to this phenomenon. Its ominous implications for the continued coherence of the Soviet state, however, became fully evident only in the last three years.

Although an undercurrent of ethnic friction was noted at many points in Soviet history, and had been apparent throughout the Tsarist period, it could be kept below the surface during recent decades, if only because *GLAVLIT*[1] , the omnipresent hand of censorship, compelled the media to keep up the pretense of a "fraternal solidarity of Soviet nationalities."

Recent revelations, however, have indicated the role played by the national question even during Brezhnev's reign; thus, Shelest[2] has mentioned his own sympathies with Ukrainian nationalism as one of the causes which led to his ouster, in part as a result of Suslov's[3] relentless pursuit of a Great Russian chauvinist policy.

Of course, there were periods in which national conflict broke into the open, particularly during the German invasion of the USSR, 1941-45, when significant elements of the population, especially in the Baltic region, the Ukraine, and Byelorussia, collaborated with the invaders. Great Russian opponents of the current rising tide of autonomism in these very areas have made the most of that unpleasant fact, not least through unkind reminders that historic symbols displayed by Byelorussian nationalists in recent months were similar to the badges worn by paramilitary elements that supported the Germans.

No observer, however, could fail to be struck by the fact that the era of *Glasnost'*, irrespective of one's views and expectations concerning its durability, should have produced a veritable flood of publications and of overt political manifestations of the profound ethnic allegiances sustained by the various peoples that dwell in the Soviet state. No less inescapable is the conclusion that the current Soviet leadership, despite its early, very tentative, references to the national question, has made no serious effort to come to grips with this fundamental problem. Indeed, for some considerable time the prospect has been held out of a CPSU[4] Central Committee Plenum that would deal with this question, both conceptually and operationally, but the actual date has been postponed repeatedly, and is now expected sometime in the summer.

---

[1]Main Administration for Safeguarding State Secrets in the Press, previously known as Main Administration of Literary and Publishing Affairs
[2]Petr E. Shelest, former member of the Politburo and First Secretary of the Ukrainian Communist Party
[3]Mikhail A. Suslov (deceased), former member of the Politburo and "Second Party Secretary."
[4]Communist Party of the Soviet Union

In many ways, this issue is not separable from power struggles among the personalities and factions at the apex of the Soviet system, if only because appointments and personnel play a central role in such struggles, and one of the first questions asked, when a new appointment is broached, concerns the nationality[5] of the candidate.

That aspect cannot be evaded, in any case, since it is stamped indelibly upon the internal "passport" and one's ancestry, rather than one's place of residence or primary language, determines the entry made under this category. An unofficial, but widely enforced, quota system establishes one's career options: certain elite institutions, especially of the military, security, and diplomatic branches, are staffed overwhelmingly by Great Russians, with a much smaller percentage of Ukrainians and Byelorussians, and only rare openings for other nationalities, and none at all for some, especially Jews.

Because of these factors, competing figures in the current Soviet leadership were unable to avoid touching upon this delicate issue, much as they would have preferred to do so. Thus, as early as the 27th CPSU Congress in February of 1986, Mikhail S. Gorbachev, in an attempt at balance, condemned "national narrow-mindedness" and "attempts to cut oneself off from the objective process of . . . drawing together of national cultures" (meaning the non-Russian nationalities), on the one hand, and "manifestations of national . . . arrogance . . . and chauvinism . . .," as well as "attempts . . . to present in idyllic tones reactionary-nationalistic and religious remnants" (meaning the Great Russians), on the other hand.

Ligachev[6], on the same occasion, was much blunter and unilaterally supportive of the (Great Russian) "center" against (non-Russian) "parochial" attitudes:

> . . . in some places parochial, localistic sentiments have taken the upperhand. They prevented the promotion to leadership posts of representatives of all nationalities, prevented . . . the exchange of experienced workers between republics and the center . . . in a number of cases this led to self-isolation, stagnation . . . [T]he selection and placing of leaders must be carried out in two ways -- from among local comrades, and by means of transferring workers from the center . . .[Emphases added][7]

This meant the abandonment of the pretense that the non-Russian republics were led by indigenous personalities and implied their replacement by Great Russians imported from Moscow, as required by economic and other considerations. In the same address, Ligachev attacked specific branches of the Communist Party, including, in particular, the Party organization in Kazakhstan. It is significant that his concept of "transferring workers from the center" was applied to Kazakhstan shortly thereafter, and an ethnic Kazakh was replaced as First Party Secretary of that republic by a Great Russian troubleshooter, Gennadii V. Kolbin. As a consequence, the local student population erupted in riots.

---

[5]"Nationality" and "citizenship" are two entirely separate concepts in the USSR and Eastern Europe; "nationality" means ethnic affinity and is unrelated to place of birth and residence, or citizenship.

[6]Yegor K. Ligachev until recently was considered by many, including himself, to be "Second Party Secretary."

[7]Pravda February 28, 1986, 2nd ed., p. 4

Three years (and a veritable flood of national manifestations) later, Gorbachev felt compelled to come out more openly against the Great Russian slogan of *sliyanie*, meaning the "merger" of the various nationalities in "the great ocean of the Russian language," asserting that "I managed with great difficulty to oppose the pressure of certain learned gentlemen who were seeking to thrust this dangerous formulation into the current (1986) Party Program." He added "we cannot permit even the smallest people to disappear, the language of even the smallest people to be lost."[8] However, there is little evidence that he has attempted any conceptual innovations and, in practice, he has followed a zigzag course, rather than a consistent line, whenever he has encountered a major ethnic problem demanding a specific response.

His various actions appear to have been influenced as much by ego as by other considerations; thus, after coming to visit the victims of the Armenian earthquake, he rushed back to Moscow, deeply offended, because Armenian bystanders had dared to use the opportunity to raise the issue of union between the Armenian Republic and the small neighboring, ethnically Armenian, enclave of Nagorno-Karabakh, which is formally a part of the Republic of Azerbaijan. There followed a stream of invective against Armenians, including slurs in the central Soviet press, implying that Armenians are the kind of people who rob the dying victims of an earthquake.

Yet the Nagorno-Karabakh issue was by no means unrelated to the number of earthquake victims, since, when Armenian leaders first raised this question, angry Azeris slaughtered dozens of Armenians in the vicinity of Baku. As a consequence, some 170,000 Armenians, including refugees from the Nagorno-Karabakh Autonomous *Oblast'*, fled Azerbaijan and were housed in rickety buildings which were the first to collapse when the earthquake struck. To add to Armenian grievances, Gorbachev ordered the imprisonment of the members of the so-called "Nagorno-Karabakh committee," which demanded union with Armenia, and the prisoners are still awaiting a formal charge or trial.

This action was not as uncharacteristic of Gorbachev's approach to autonomist trends as many in the West assume. Thus, despite widespread impressions to the contrary, Gorbachev's amendments, when first drafted, changed the Soviet constitution in the direction of further centralization and harsher provisions against autonomist manifestations, when compared to the 1977 "Brezhnev constitution," and even more (at least on paper), when compared to the 1936 "Stalin constitution." The "Brezhnev constitution" itself deprived the Union Republics of their linguistic autonomy, a change that had to be reversed, however, for the two Republics that protested most vehemently, Armenia and Georgia.

The constitutional amendments submitted by Gorbachev in October of 1988 amounted to

[8] *Pravda* January 8, 1989

further aggravation, rather than amelioration, as far as the autonomy rights of the Republics were concerned. These amendments were submitted to "discussion" and the Soviet press stated that no less than 300,000 proposals and comments had been received from the Soviet population. Since the period of "discussion" amounted to all of five weeks, one can imagine how much attention was devoted to any of these 300,000 suggestions. In fact, some minor adjustments were made between the publication of the draft on October 22 and the passage of the document at the beginning of December. In the draft, the newly established Soviet Congress of Peoples Deputies was given power to "repeal legislative acts adopted by . . . the supreme organs of state power in the Union and Autonomous Republics if they are not in line with the Soviet constitution." To be sure, the final version does not contain this section, which had aroused strong objection in the Baltic Republics.

However, those who praised the omission of the offending sentence paid little attention to the fact that very similar power was given to the Supreme Soviet of the USSR, both in the draft and in the final version, to wit, the Supreme Soviet "repeals resolutions and orders by Union Republic Councils of Ministers in the event of their being inconsistent with the USSR constitution and the USSR laws." Interestingly enough, the 1977 constitution, while containing the general principle of "uniformity of legislative norms throughout the USSR" and of "conformity of the constitutions of Union Republics to [sic] the constitution of the USSR," did not give the supreme legislative organ of the USSR a specific right of veto.

Together with the new and astonishingly vast powers granted under the new dispensation to the Chairman of the Presidium of the Supreme Soviet in his new capacity (clearly intended to be Gorbachev himself), the impact of the constitutional amendments unmistakably means continued centralization. It was with this specter menacing the national movements for greater autonomy, that the Estonian Supreme Soviet passed its own laws enabling it to override central Moscow legislation before the new Gorbachev amendments could be officially adopted. Subsequently, Estonian representatives were summoned to Moscow to be told that such measures by a Union Republic were unacceptable and unconstitutional. It is interesting to note that when the final package of Gorbachev amendments passed the Supreme Soviet of the USSR, for the first time in decades over 30 deputies abstained or voted against, almost all from the Baltic Republics.

Before reviewing the details concerning the exacerbation of the nationality conflict in the USSR during the last three years, it is essential to address some of the generic factors that are at the core of the overt manifestations that provide headlines now, on an almost daily basis.

The first of these factors is the territorialization of the nationality problem. In earlier years, it had been possible to view this issue primarily as a human rights question. The accent during that period had been on the right to leave the USSR, to move within the USSR, to participate in worship,

to educate children in one's own culture, at least in the home, *i.e.*, essentially individual (as opposed to group) rights. Consequently, the nationality problem was subsumed in the wider struggle for human rights, which, in one way or another, affected all of the ethnic groups in the USSR, although those without a territorial base within the Soviet state (Crimean Tatars, Poles, Jews, Germans, who have no Union Republic, Autonomous Republic, Autonomous *Oblast'*, etc.), were most deeply concerned.

As of the last three years, however, the nationality question has changed in its manifestations to an overt conflict over control of territory. Thus, nationalities with a Union Republic "of their own" have attempted a) to raise the indigenous language to the level of that Republic's official language, b) to permit the local state and Party apparatus to play a genuine role in governing, including the right to veto edicts and legislation from the center (Moscow), and the reassertion even of the right to secede (theoretically permitted by the Soviet constitution), as well as c) to stop the inflow of other nationalities (particularly Great Russians), and, in certain cases, to oust immigrants of recent years.

These could be viewed primarily as manifestations of "regional" or "peripheral" problems, since they affect almost all of the Union Republics as entities and since the territories concerned are situated at the northwestern, western, southern, and southeastern edges of the Soviet state. However, the phenomenon in fact transcends the current administrative boundaries within the USSR and, in a way, is a byproduct of certain demographic trends of major significance.

While the Soviet 1989 census is underway, it will take some time until its results become accessible and can be analyzed. However, Soviet statements of recent months provide an indication of some of the significant trends and many of these were evident already from the results of the 1979 census, particularly as compared with the 1959 results. Soviet reports now speak of between 55 and 60 million Soviet citizens who live outside the boundaries of "their own" territories (*i.e.*, Union Republic, Autonomous Republic (ASSR), Autonomous *Oblast'*, etc.), or who have no such territory. This is the result, in part, of deliberate gerrymandering of the boundaries of these entities, but also of "colonization" of non-Russian territories by Great Russian (occasionally also Ukrainian and Byelorussian) immigrants.

In the 20 years between the 1959 and 1979 censuses, the number of Great Russians living outside "their" Republic (the RSFSR) rose from 14.24% to 17.38%, *i.e.*, from 16,251,000 to 23,875,000, and, by now, that number must be close to 30,000,000 (out of the 50-60 million persons stated to be living outside "their own" territories). The Great Russians concerned have moved primarily into the major cities of Latvia and Estonia, to the Black Sea coast and the heavily industrialized sectors of the Ukraine, and the urban areas of the Central Asian Republics. This spread of the Great Russian population has created major friction with the indigenous peoples, and is seen as

an effort to expand the boundaries of the RSFSR, since the result has been to turn the northeastern part of Estonia, the capital city of Latvia, and portions of the Kirgiz and Kazakh Republics, into areas with a pronounced Russian character. In 1979, the Kirgiz constituted only 40.5% of the population of "their own" Republic, and Kazakhs were down to 36.0% of the inhabitants of Kazakhstan.

At the same time, however, there was a countervailing trend: Great Russians, as a proportion of the Soviet population as a whole, during these two decades declined officially from 54.65% to 52.42%, and this included a sizable number who managed successfully to "pass" as Great Russians in order to qualify for the more prestigious institutions of higher learning and for the resulting positions. (The number of persons "passing" as Great Russians was estimated at 5 million in 1979.[9]) It is entirely conceivable that today the Great Russians in fact are a minority within the USSR as a whole, and the 1989 census, at the very least, will show a further decline from the 1979 percentage. Minority or not, Great Russians constitute the only element of the Soviet population which enjoys full use of its own educational institutions, its own language, and all other cultural and social perquisites, irrespective of place of residence, *i.e.*, whether they dwell in the RSFSR or elsewhere. In that sense, they do not suffer the disadvantages of minority status, whereas Latvians, for example, in their own capital city of Riga, have had to attend educational institutions in which Russian is the language of instruction; Latvians outside the Latvian SSR enjoy no national or cultural privileges whatever. In other words, at least until recently, the Baltic peoples and most other non-Russians were non-privileged minorities wherever they lived.

One is dealing, therefore, with manifestations that constitute almost a parody of the Hegelian Dialectic: Great Russians, as the Soviet *Staatsvolk* (the nationality upon whose shoulders the leadership of the state rests), are expanding across the breadth of the Soviet Union but declining as a percentage of the total population. The former phenomenon is leading to massive resistance on the part of non-Russians, while the latter is creating anxiety complexes among Great Russians themselves and has produced a chauvinistic Russian backlash, the most overt and sinister aspect of which consists of the movement known as *Pamyat'* (Memory).

Originating among employees of the Ministry of Aviation, and receiving support from certain branches of the Communist Party *apparat*, particularly in Leningrad, *Pamyat'* has taken on increasingly neofascist characteristics, with constant references to Russians being "exploited" by non-Russians, with particular reference to "Freemasons and Zionists" (slogans that smack unpleasantly of terminology employed by the Nazis and by elements of the Russian Tsarist police). In case the analogies were missed, there have been *Pamyat'* demonstrations in which the Hitler salute was given, while members of the militia stood by and did not intervene. At least two Soviet journals have

[9]About 140,000 "Great Russians" were reported as unable to speak Russian as their first language, and another 4,810,000 were registered as bilingual, yet one of the major grievances that have fueled current ethnic dissonance has been the refusal of genuine Great Russians to learn the language of another Soviet nationality.

become almost entirely *Pamyat'* preserves, especially Nash Sovremennik, and certain writers have become essentially mouthpieces of the movement. Moreover, an umbrella organization has been set up to link such writers, publications, and other Russian nationalist sympathizers, under the generic title of *Otechestvo* (Homeland), which held its constituent meeting in Moscow during the last week of March. Among the participants were the chief editors of Moskva, and of Molodaya Gvardiya (one of the *Komsomol* organs), as well as of Nash Sovremennik.[10]

To stress even further the "internal contradictions" which are so essential to the Hegelian Dialectic, former Moscow Party boss Boris Yeltsin, the supposed "liberalizer" among the elite, in fact was the godfather of *Pamyat'*, as the first Party leader to receive a *Pamyat'* delegation and to extend a degree of symbolic support to the movement. *Pamyat'* constitutes a peculiar meeting ground of nostalgia, on the one hand, for the Tsarist past, including the display of icons of the last (hemophiliac) Tsarevich, and, on the other hand, for "the good old days" of Stalin! The common factors are reactionary sentiments and antiSemitism, as displayed in a highly publicized letter in 1988 by Ms. Andreyeva, a schoolteacher who enjoyed obvious "protection" from above. While admittedly traces from *Pamyat'* seem to lead in the direction of Ligachev, there is no evidence that Gorbachev has made any serious effort to rid the Soviet body politic of this excrescence.

There are reasons why the Party leadership as a whole, to the degree that it has not actively protected *Pamyat'*, at the very least has tolerated it. As mentioned earlier, this has to do with the sudden transformation of the nationality issue from a human rights question to a major territorial problem. In the Baltic Republics most notably, but also in the Transcaucasian Republics, Byelorussia, the Ukraine, Moldavia, and very recently Central Asia, national movements have come to the fore under various names, such as "Popular Front," and have raised high the banner of genuine autonomy and, occasionally, of full sovereignty including independence. In several Republics, legislation has been passed that elevates the indigenous tongue to the status of an official language, requiring other members of nationalities living there to be at least bilingual, and that has made the necessary adjustments in language of instruction and of communication between individuals and the bureaucracy. Moreover, many of the local legislatures have demanded a degree of equality between their legislation and that of the Supreme Soviet of the USSR (not to speak of decrees simply imposed from above), and they have reinstated the national flags and anthems that were outlawed when the areas concerned were annexed by the USSR. In some cases, such as Moldavia and certain of the Central Asian Republics, the legislatures have demanded that the Cyrillic alphabet, imposed upon the local languages by Russian rulers, be replaced by the original Latin alphabet in the case of Moldavia, and the Arabic alphabet in Central Asia. In the latter instance, there are, of course, religious

[10]Sovetskaya Rossiya, March 26, 1989, 2nd ed. , p. 6

implications, since Arabic is the language of the Koran. To a limited extent, the reassertion of ethnic identity by the Turkic and Iranian peoples of Central Asia, has a religious as well as a secular aspect.

In all of these instances, however, there has been a negative impact upon Russian residents of the other Republics, who number in the millions, as has been pointed out, and who constitute a majority in several sizable portions of territory outside the boundaries of the RSFSR. Because of their presence it has been possible to organize ultranationalist, anti-autonomist, movements, under such misleading titles such as "Intermovement" (short for "Internationalist Movement"), which have arisen in part, perhaps, spontaneously, but more probably with the help of the security agencies (Chebrikov, who now exercises broad oversight with regard to both MVD and KGB, played a major role in efforts to intimidate Baltic nationalists), and with a substantial component of *Pamyat'* supporters and sympathizers. Their "grievance" is that they cannot be expected to know the indigenous languages and, therefore, unlike Lithuanians, Latvians, etc., they have never become bilingual and would be disadvantaged under new local legislation, however liberal its intent might be. *Pamyat'*, of course, goes further and states that this is a deliberate plot to discriminate against Russians.

"Intermovement," however, is not the only creation of its kind; the security organs have gone one step further and have mobilized other minority elements, particularly in the Baltic Republics, such as Poles, who had already suffered the indignity of being deprived of cultural and educational institutions of their own, so that, involuntarily, over 80% of Soviet Poles had become Russian speakers. Now it was expected of them that they would also become fluent in Lithuanian, so that they felt a double grievance. Consequently, wonder of wonders, it became possible to organize Russians and Poles in a single movement in Lithuania, called *Yedinstvo*, to oppose the Lithuanian national movement which operates under the name of *Sajudis*.

More sinister are several further developments: Some months ago, the Ministry of the Interior (MVD) was given a paramilitary arm, so-called "special detachments" (also known as Black Berets), and regulations were published concerning their field of action, including the right to open fire on demonstrators, and permission to implement search and seizure in private apartments. V. V. Bakatin, Soviet Minister of the Interior, interviewed at the end of March, stated that these "detachments" had been set up to deal with

> formations which pursue nationalist, separatist, anti-socialist, and other anti-constitutional goals . . . . If such formations clash with the law, for example by inflaming national strife, force should also be applied.

He went on to say that, if such "formations" (*e.g.*, the Popular Fronts in the Baltic States) were prohibited

> from holding demonstrations, rallies, pickets, and congresses, and thus organizing provocations or attempting to cause mass disturbances, it is incumbent upon MVD organs to perform their duty . . . . All the clamor around the 'special detachments' is no accident . . . . We cannot overlook the multi-faceted campaign aimed at discrediting the militia. Extremists are brainwashing the population in order to arouse a negative attitude toward the militia as 'stiflers of democracy.' There are also attempts to demoralize the militia from within and to infiltrate its ranks.[11] [emphases added]

In effect, Bakatin was admitting that the regular police force (militia) of the MVD had become unreliable and that this was one of the reasons for the deployment of "special detachments." It is hardly a coincidence that this development occurred at the time of the first public demonstrations of ethnic assertiveness in non-Russian Republics and, what was worse from the Soviet point of view, at the time of efforts in Lvov and in Vilnius to establish linkage between the Baltic, Ukrainian, Byelorussian, Armenian and Georgian national movements.

Moscow has been uneasy, since the early 1960s, about the use of Red Army regulars against the civilian population; during food riots in Black Sea ports at that time, Red Army units refused to obey orders and threatened their officers. One of the Army's problems stems from a decline of the number of Russian recruits because of a dip in the demographic curve and the fact that draftees from among the "Moslem nationalities" now exceed 37% of the annual intake, a percentage that is increasing by leaps and bounds. (The population of the so-called "Moslem nationalities" increased by 83.6% from 1959 to 1979, whereas Great Russians and other "European" nationalities increased by a mere 17.8% during the same period.) This factor undoubtedly played a role in Gorbachev's "unilateral" offer in 1988 to cut back the size of the Red Army, since he might be faced with a largely "Moslem" military force unless he did so.

Whatever Moscow's hesitations are concerning resort to regular army units, should MVD elements prove insufficient, Riga happens to be also the HQ of the Baltic Military District, so that Red Army formations, if necessary, could back up the Black Berets. A Latvian anecdote asks "If the Popular Front and the Intermovement clash, who will be the winner?" Answer: "The Baltic Military District." In this connection, the most ominous development has been the publication on an almost daily basis in the Red Army's journal, Krasnaya Zvezda, of threatening articles, claiming that Russian servicemen in the Baltic region, upon asking directions, are refused a reply unless the question can be repeated in the vernacular. If the servicemen are able to comply, so the Red Army newspaper asserts, they are then assailed by cries of "Occupier," "Colonist," "Go Home." It should be noted that this is the first time, since the ouster of Marshal Zhukov in 1957, that the Red Army appears to have involved itself in an essentially political issue. There is no evidence that this is being done against

[11] Nedelya No. 12, 20-26 March 1989, pp. 13-14

Gorbachev's wishes or without his support. Indeed, on April 9, 1989, following essentially peaceful demonstrations in Georgia, Gorbachev, in his capacity as Chairman of the Presidium of the Supreme Soviet, issued a very harsh decree, added to the Soviet criminal code, that established severe penalties for "public insults or the discrediting" of state bodies and officials and for "kindling inter-ethnic or racial hostility."[11] Thus, the criminal code was added to the organizational, paramilitary, and military entities available for action against autonomist, grass-roots movements in the non-Russian Republics.

Gorbachev clearly could not hope to control the outpouring of national sentiment, particularly in the Baltic Republics, through more conventional means, *i.e.*, the local communist apparatus, for the simple reason that, in Lithuania for instance, sizable portions of that apparatus have been co-opted by the autonomist *Sajudis*, to the extent that *Sajudis* decided in the recent balloting for the Council of Peoples Deputies not to compete against the First Party Secretary of Lithuania, since he had been very forthcoming to Lithuanian national demands. Consequently, a crackdown against the national manifestations in the peripheral Republics, a development that appears to be coming ominously closer from week to week, would force the Soviet leadership to rely upon a consortium of "Intermovement," *Yedinstvo*, *Pamyat'*, the Black Berets, and Red Army units. Perhaps in anticipation of such eventualities, Great Russian settlers have demanded the creation of a new territorial unit in the northeastern segment of Estonia, an area that has been almost completely Russified. In effect, it is telling Estonians, "If you try to separate yourself from Mother Russia, we will separate this area from your Republic."

Events in Estonia must be seen in the context of the point made earlier, namely that the boundaries of Union Republics, Autonomous Republics, etc., simply do not coincide with the cultural and linguistic frontiers of the peoples which these entities are supposed to represent. This factor was the catalyst that led to the traumatic clash between Azeris and Armenians over the Nagorno-Karabakh problem, and has produced bloody events in Georgia, another area in which a Christian people has found itself confronting Moslems. The only difference is that, whereas Armenians were demanding the transfer of their kinsmen in the Nagorno-Karabakh Autonomous *Oblast'* from the yoke of Moslem Azerbaijan, in the Georgian case the Moslem Abkhaz are demanding secession from a Christian Republic. Significantly, Soviet central authorities in each case have taken sides with Moslems against Christians. The evident bias against the Armenians has been referred to already; in the Georgian case, Christian demonstrators were fired upon. The demographic pressure of the "Moslem nationalities" may have a great deal to do with this tendency, as well as Soviet concern about the impact of Moslem fundamentalism upon its Turkic and Iranian nationalities. During the Azeri

[11] The New York Times, April 10, 1989, p. A7

confrontation with Armenians, some of the Azeris unfurled the green banner of Islam and graffiti hailing the Ayatollah were seen.

There are pitfalls of which Sovietologists, no less than other observers, must beware. A tendency has developed in the West to ascribe all moves in the direction of greater toleration to Gorbachev and all harsh measures to his opponents. There is no substantive body of evidence to support this view. It is correct that, as cited earlier, Gorbachev has been inclined to seek support from non-Russians primarily because Ligachev, Chebrikov and others have attempted to monopolize support from Great Russian nationalists. However, this is by no means a straightforward delineation of different policy approaches. Thus, Gorbachev was at great pains to emplace one of his long-time associates, A. V. Vlasov, in the machinery of the RSFSR (as Chairman of the Council of Ministers of the Russian Republic). Of course, not all Russians are chauvinists. Such a liberalizing movement as "Democratic Union" enjoys support, particularly among segments of the Russian intelligentsia, although the masses appear apathetic when they are not nationalistic.

The severity of Gorbachev's attitude toward developments in Armenia and in the Georgian Republic has been illustrated, and it appears that he has played a role at least in putting the organizational, punitive, paramilitary, and military infrastructure in place for a potential crackdown on autonomist and separatist movements. If it comes to that point, he is likely to seize the initiative in ordering such a move, rather than have others do so (with the implication that his fledgling steps toward *glasnost'* were responsible for letting the nationalist genie out of the bottle). Events in Georgia, as well as in Armenia, show that he is not constrained by any feelings of reluctance, when he believes his prestige and power are at stake.

The CHAIRMAN. Thank you very much.
Dr. Simes.

STATEMENT OF DR. DIMITRI K. SIMES, SENIOR ASSOCIATE AND DIRECTOR, U.S.-SOVIET PROGRAM, CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

Dr. SIMES. Thank you very much, Mr. Chairman. I will make five points. I will obviously have to speak in abbreviated style.

Point No. 1, what I think we are witnessing today in the Soviet Union is a profound and historical change, and that change affected Soviet ideology as well. If you look at about every classical Marxist-Leninist dogma, as we used to understand it, today is being revisited and sometimes revised. Inevitability of world revolution being revised. One-party dictatorship being revised and questioned even by some members of the Soviet leadership, not as something they would like to change today, but certainly they are willing to discuss in the long-term perspective.

The working class as the leading force of the Soviet society, they are now prepared to give much greater role to intellectuals. Profes-

sor Ra'anan talked about nationalities. Everybody in the leadership today when people like Ligachev and Chebrikov, at least on the rhetorical level acknowledge that republics' ethnic minorities should have a much greater self role. How much greater is open to debate, but the movement in the direction of great autonomy is quite clear.

There are no sacred cows anymore in the Soviet Union. You read an article in a leading Soviet publication where it also states that it was Lenin who was responsible for Stalinism, and that you cannot have a real pluralism in the context of one party dictatorship. And they also have this article is not the staff of Central Committee Secretariat?

You read an article in probably the most dogmatic journal in the Soviet Union, Issues of the Communist Party History, where one of the leading professors of this history also on the Central Committee staff says it would be an oversimplification to reject parallels between Stalinism and Facism. There were differences, but they are moral equivalents. Now, if that is not revision of Marxist-Leninism as we understand it, I do not know what would qualify for revision.

My point No. 2, however, is that it is not universally good news. Because what I see today is a new bright and a new ideological zeal in the Soviet Union.

In a way Mr. Gorbachev and people around him seem to be more ideological than their less illustrious predecessors, people like Leonid Brezhnev and company, people who were using a lot of ideological cliches, but they probably did not take them seriously themselves.

What I see today is a new bright and new messianic zeal in Moscow that did not quite develop a new ideology yet, but they are already trying to go around the global with a new messianic passion. And they have to say that it is clearly a rather imperial ideology because anyone in the Soviet leadership clearly acknowledges that the Soviet Union should remain a global superpower and that the status of the Soviet Union as a multinational empire is next to negotiable.

So, the very severe and important limits to what Gorbachev wants to change in the Soviet Union and I particularly want to emphasize this element of new zeal and new bright.

No. 3, however, is I do not know how relevant Gorbachev's personal preferences are because in my view Gorbachev is a unique Soviet and Russian leader. As I look at Russian history from Ivan the Terrible to Peter the Great to Alexander I, a liberal reformer, Alexander II, to Lenin and Stalin to Khrushchev, I cannot find a single Russian leader who came to the people and said "I do not want you to rely on the benevolent tsar. I want you to become political players yourself."

Gorbachev is unique in a sense that he made the statement, "Perestroika cannot succeed if it would be limited to efforts from the top. People should become involved. People should be entitled to organize. The Soviet Union needs a civil society."

That, of course, has very important consequences. They are new players, they are new voices. It is an evolving process. Only a year ago a rather unknown teacher of chemistry from Leningrad could

publish an article which was later labeled as an antiperestroika manifesto, and everybody was terribly frightened in the Soviet Union. It is different today.

After the 19th party conference, after these elections people seem to be energized, and the real question in my view is not what Mr. Gorbachev and his colleagues want, but how far they would allow this process to go, the process they have unleashed. But as events in Georgia and elsewhere demonstrate, they cannot quite control. They want people to become involved, but on Gorbachev's terms. That really cannot work that way. So, the moment of truth is arriving.

That brings me to my point No. 4. I really agree with the conservative writer Yuri Bondrev who said the 19th party conference that perestroika reminds him of a plane that took off. The old airfield is no longer there, but there is no new one where this plane of perestroika can land.

All I know for sure, that they cannot go back to Brezhnev and Stalin. It is not only because people were energized and got involved. What Gorbachev has done, and that is very different from what was done by Khrushchev or anyone else among Russian reformers—take Alexander II—what Gorbachev had done was to discredit his own machinery of power, the party apparatus, the government bureaucracy and security services.

Accordingly in my view it is next to impossible to go to totalitarian rule, either terrorist rule like under Stalin, or more benign terrorist rule like under Brezhnev. Neither people are there to accept it. They were too much involved in politics, nor is there a machinery of totalitarian control which the government could use.

But if this is my most optimistic conclusion, I have also a pessimistic one. The fact that they cannot go back to Brezhnev and Stalin——

Senator BIDEN. That was your optimistic conclusion?

Dr. SIMES. That was my optimistic conclusion, that they cannot go back to Brezhnev and Stalin. But I also have a rather pessimistic one. It does not mean that they cannot go to a kind of red junta, that they cannot try Yerushalski's scenario.

As the country becomes ungovernable, if you could have riots, if you could have demonstrations, if you could have this overlapping situation when consumer goods and food stamps are less and less available, nationalities are more and more demanding, they may decide that some draconian measures are quite necessary.

And I am a little uncomfortable with our debate about the future of perestroika which focuses entirely on Mr. Gorbachev's own political future.

If you look again at the Russian history, you can find quite a few Russian and Soviet leaders who unleashed perestroikas of their own then could not control them and they said enough is enough.

So, the reason question is not whether Mr. Gorbachev will stay in power but how far he and his colleagues will allow this process to go. It is an open question. It is a very complex process with many players with many voices and with multiple outcomes ranging from real political pluralism if Gorbachev and company fail to crack down on those forces they have unleashed to a rather nasty military Communist regime.

That brings me to my final point. Because of the complexity of this situation, because states are so great in the Soviet Union, because we do not know quite enough about what is going on, I think it would be wise for the United States to stay as an interested observer.

We have one important piece of good news. Across the political spectrum in the Soviet Union they understand their resources are limited. Even Pamyat is not calling for foreign policy aggression. They may be less comfortable and less a feeling as negotiating partner, but whatever happens in the Soviet Union for a while, they are going to be busy with their own affairs and they are quite uncomfortable with people who come to this committee and elsewhere and appeal for some kind of assistance to Mr. Gorbachev.

We are already assisting him, meeting his proposals on their own merit. He is a different style of the Soviet leader, and I think he is being met by the United States quite constructively. To go beyond it may be extremely counterproductive and would in my view reduce those pressures on the Soviet leadership which brought them where they are today and which can bring them even further. Thank you.

The CHAIRMAN. Thank you, Dr. Simes.

Now, we will hear from Dr. Starr, the president of Oberlin College.

STATEMENT OF DR. S. FREDERICK STAAR, PRESIDENT, OBERLIN COLLEGE, OBERLIN, OH

Dr. STAAR.-Thank you, Mr. Chairman and members of the committee.

I seem to be somewhat of an optimist among pessimists. In his United Nations speech of December 7 Mr. Gorbachev implied a rollback of official dogmatism in the Soviet Union, saying "We are far from claiming to have a monopoly on the truth."

Pragmatism and the ability to improvise, rather than ideology, seem to be the qualities now valued in the Kremlin, yet reform itself seems threatened. Economic renewal lags behind political change. GNP in 1988 was equal to the worst years of stagnation under Brezhnev. There is a spot regional unemployment as high as 18 percent, so much inflation that people are hoarding gold, and outright hunger in some areas of the country.

Social unrest is evident in the rise of violent crime and in wildcat strikes which are largely unreported by our press, and then there are the non-Russian peoples who have been asserting their national claims against Moscow. Together, these danger signals create a volatile situation that could be ignited by a spark.

Now, what might happen should such a crisis occur? Some claim a general reaction would set in with Mr. Gorbachev seeking to impose firm limits in order to thwart anarchy. Others foresee Mr. Gorbachev falling from power and being replaced by a centralizer, a populist strong man. Pessimists have gone beyond this to set forth a full plan on how the United States should then respond. They propose that we adopt a wait-and-see attitude in arms, in trade, in other bilateral issues.

Knowledgeable American politicians, diplomats, and scholars have made these suggestions, but is such a turn of events really so likely, and should we build our policy on the assumption that it might occur? I have no crystal ball, but I believe our discussion has neglected important features of the Soviet condition today. I would like to speak of these.

What is occurring there? Unobtrusively and scarcely noted even by our specialists, Soviet society has changed. I stress society has changed. This has occurred over several decades. Education was expanded, vast amounts of information became available to the public even before glasnost. Contact with the outer world grew through transistor radios and travel. Horizontal communication among members of the public grew easier thanks to the private home telephone, tape recorders, cheap transportation, and so forth. And fear decreased.

This emboldened many Soviets to engage in unsanctioned entrepreneurial activity and to create a twilight second economy estimated to account for up to 15 percent of nonagricultural GNP. It emboldened others to form unsanctioned clubs, groups, and voluntary associations. Pravda estimates their number to be 60,000 today. Thousands of these exist solely to influence public policy, and the groups network among themselves to form federations. There are now dozens that claim themselves to be political parties. These will vote as blocs in the new parliament. And incidentally, three of these parties are in Georgia. Having met with many of their members recently, I can assure you they are, for the most part, level-headed defenders of self-determination, federalism, and democratic institutions and not ethnic fanatics.

Together, these developments have created a public opinion in the Soviet Union that is independent of the government and of the Communist Party. The have created an embryo of what John Locke called a "civil society."

Now, large parts of Soviet society have today moved ahead of Mr. Gorbachev's program. To his great credit, he has not tried to repress them but to accommodate the Soviet system to what it is unable or unwilling to resist. In his way, you might say Mr. Gorbachev is a conservative reformer, fostering radical changes in order to preserve the core of the system he serves.

The present situation is perilous, and it could be ignited. Yet, I believe our worst fears are greatly exaggerated and not merely because the amount of force needed to suppress this great social movement is large and mounting daily.

In even the gloomiest future I cannot imagine the full suppression of the vigorous new public opinion in the Soviet Union, nor can I imagine the Soviet State again using ideology as an instrument of control, so completely have the state and party themselves undermine Marxism-Leninism.

A large part of the populace will continue to behave as citizens, not as subjects, and will assert its rights against the state as much as its duties to it. Nor can I conceive that the underlying pluralism of Soviet politics can be obliterated, even within the Communist Party which, it seems to me, includes a range of views broader than that spanning liberal Democrats and conservative Republi-

cans in our Congress. Things have gone too far to go back without a catastrophic use of force.

What are the implications, then, for the United States? It seems to me we can respond to concrete Soviet proposals and actions in the area of arms control, remaining mindful, of course, of our security needs at each phase. As we negotiate, we can be sure that Soviet public opinion will continue to call for more butter, which now means fewer guns. Calibrating progress toward marketization and privatization in the Soviet economy, we could remove impediments to normal businesslike trade in nonstrategic goods to the extent that Soviet leaders abide by their express resolve to let other societies develop unimpeded. We should be prepared to engage them as partners in resolving regional disputes in issues of mutual interest.

Now, all of this should be undertaken prudently and with due caution, but also with the confidence that comes from knowing that there are powerful forces within Soviet society itself that are tearing that country away from its totalitarian ideology and pushing it toward becoming a true civil society. Thank you, sir.

[The prepared statement of Dr. Staar follows:]

PREPARED STATEMENT OF S. FREDERICK STARR

In his U.N. speech of December 7, Mr. Gorbachev announced a roll-back of official dogmatism in the USSR, saying:

"We are far from claiming to have a monopoly to the truth."

Pragmatism and the ability to improvise are the qualities now valued in a reform-minded Kremlin.

Yet reform itself seems gravely threatened:

*Economic reform lags behind political reform. The GNP grew less in 1988 than under Chernenko or Andropov and was equal to the worst years of stagnation under Brezhnev.

*This has brought regional unemployment as high as 18%, so much inflation that people are hoarding gold, and outright hunger.

*Social unrest is evident in the rise of violent crime and in wildcat strikes, largely unreported by our press.

*Non-Russian peoples of the USSR -- Latvians, Georgians, Estonians, etc. -- employ mass demonstrations to assert their national claims against Moscow and also their normal civil rights.

Together, these danger signals create a volatile situation that could be ignited by a spark, whether set off accidentally or deliberately, by a foe of change.

What might happen should the crisis deepen?

Some claim a general reaction would set in, with Mr. Gorbachev seeking to impose firm limits in order to thwart anarchy.

Others foresee Mr. Gorbachev falling from power and being replaced by a centralizer, a populist strongman.

Pessimists have set forth a full plan on how the U.S. should respond:

*We should exercise great caution, adopting a "wait and see" attitude.

*We should delay plunging into negotiations for radical arms reduction, or for expanding trade or credits that could strengthen a hostile system. We should even be prepared to deal with some military adventure devised by Soviet leaders to divert their publics' attention from domestic problems.

Knowledgeable American politicians, diplomats, and scholars have made such suggestions. But is such a turn of events really likely? Should we build our policy on the assumption that it will occur?

I have no crystal ball. But I believe our discussion has neglected

important features of the Soviet condition today. I would like to speak of these.

What, then, is occurring in the USSR?

Unobtrusively and scarcely-noted by even our specialists, Soviet society has changed. I stress: society has changed. Over several decades,

*Education has expanded.

*Vast amounts of information became available to the public, even before Glasnost.

*Transistor radios and travel expanded contact with the outer world.

*Horizontal communication among members of the public grew easier, thanks to the private home telephone, tape recorder, and cheap transportation.

*Fear decreased.

This emboldened many Soviets to engage in unsanctioned entrepreneurial activity, and to create a twilight "second economy" estimated to account for up to 15% of non-agricultural GNP.

It emboldened others to form unsanctioned clubs, groups, and voluntary associations. Pravda estimates there are now 60,000 of them. Thousands exist solely to influence public policy. And the groups "network" among themselves, forming federations and even the several dozen political parties which made their debut in the recent elections. These will vote as blocs in the new parliament. Incidentally, three of these parties exist in Georgia. Having met many of their members I can assure you they are for the most part level-headed defenders of self-determination and democratic institutions and not ethnic fanatics.

Together, these developments have created a public opinion that is independent of the government and communist party. They have created an embryo of what John Locke called a "civil society." (I have written of this in an article in Foreign Policy which I submit for the hearing report.)

Now, large parts of Soviet society have moved ahead of Mr. Gorbachev's program. To his great credit, he has not tried to repress them but to accommodate the Soviet system to what it is unable or willing to resist.

In his way, Mr. Gorbachev is a conservative reformer fostering radical changes in order to preserve the core of the system he serves.

The present situation is perilous. It could be ignited, with grim consequences. Yet I believe our worst fears are greatly exaggerated, not merely because the amount of force needed to suppress this great social movement is large and mounting daily.

*In even the gloomiest future I cannot imagine the full suppression of the vigorous new public opinion.

*Nor can I imagine the Soviet state again using ideology as an instrument of control, so completely has it undermined Marxism/Leninism.

*It is inconceivable that the populace will cease behaving as citizens and revert to the status of subjects or that they will stop asserting their rights against the state as opposed to their duties to it.

*Nor can I conceive that the underlying pluralism of Soviet politics can be obliterated, even within the Communist party, which now includes a range of views broader than that between liberal Democrats and conservative Republicans in our Congress. The Soviet Union is already de facto a multi-party state. Things have gone too far to go back without a catastrophic use of force.

What are the implications, then, for the United States?

* Our government should acknowledge that there are strong and positive forces at work in Soviet society as well as a charismatic leader heading the Soviet state. We can be less preoccupied with lurid worst case senarios.

*We can respond to concrete Soviet proposals and actions in the area of arms control, remaining mindful, of course, of our security needs at each phase. As we negotiate we can assume that Soviet public opinion will continue to be emphatic in its calls for more butter, which now means fewer guns.

*Calibrating progress toward marketization and privatization in the USSR, we should remove impediments to normal business-like trade in non-strategic goods.

*To the extent that Soviet leaders abide by their expressed resolve to let other societies develop unimpeded we should engage them as partners in resolving regional disputes and issues of mutual interest.

Now, all of this should be undertaken prudently and with due caution but also with the confidence that comes from knowing there are powerful forces within Soviet society itself that are tearing that country away from its totalitarian recent past and pushing it toward becoming a true civil society.

FOREIGN POLICY
NUMBER 70 SPRING 1988

SOVIET UNION: A CIVIL SOCIETY

by S. Frederick Starr

What better way is there to initiate a program of reforms than to persuade the public that life stagnated under a predecessor's policies? There is no better evidence of Soviet leader Mikhail Gorbachev's political prowess than the thoroughness with which he has accomplished this discrediting. In his view, the vitality of the post-Stalin thaw gave way to a period of turgid bureaucratism during which not only the Soviet government and economy but also the society at large succumbed to a profound malaise.

Successful political slogans must contain at least a grain of truth, and the notion of general stagnation under the late Soviet leader Leonid Brezhnev meets this test. Long before the economy went flat about 1978, the regime had become petrified and oligarchic, thereby repressing the very forces that might have stimulated economic renewal. Where Gorbachev is seriously wrong—and where many Americans err in accepting his view—is in his claim that the manifest stagnation in the Communist party and bureaucracy pervaded Soviet society as well.

Much of what happened in Soviet society under Brezhnev was bound to strike a provincial bureaucrat like the young Gorbachev as decadent, but this says as much about the mentality of officialdom as about the social dynamic itself. For while the official economy lagged, an entrepreneurial "second economy" burgeoned. In unprecedented numbers young Soviets became contributing participants in the global youth culture, forcing the government to accept what it could not alter. Individual citizens in countless fields plunged into innovative work, blithely ignoring official taboos and following wherever their interests led them. Torpor may have reigned in the official world, but Soviet society in Brezhnev's time experienced great ferment. To be sure, corruption abounded. But the rise of corruption must be laid directly to the regime's failure to open legitimate channels for the new energies rather than to some cancerous venality that had entered the body politic. Indeed, the social energies that were marginalized or suppressed under Brezhnev provide much of the impetus to today's economic and political reforms.

S. FREDERICK STARR *is president of Oberlin College and founding secretary of the Kennan Institute for Advanced Russian Studies at the Woodrow Wilson International Center for Scholars.*

Gorbachev may be excused for playing down the dynamic element in Soviet society. To accept it he would be acknowledging that much of the initiative for change has shifted from the Communist party to society. Gorbachev then would appear not as the revolutionary leader calling a somnolent nation to action but as a conservative reformer trying to save a system facing pressures beyond his control.

Western analysts cannot so easily be excused for their narrow concern with Kremlin politics to the neglect of the social realities underlying them. To their credit, American researchers first identified the impact of alcoholism on the life expectancy of Russian men, as well as the demographic trends creating a labor shortage in European Russia and a baby boom in Soviet central Asia. But most have dismissed the broader changes occurring in Soviet society as not germane to explaining Moscow's actions to U.S. television viewers and members of Congress.

Gorbachev's June 1986 statement to Moscow writers that "Soviet society is ripe for change" exemplifies his sleight of hand and reveals the source of westerners' analytic errors. For Soviet society was already in the process of change; what is "ripe for change," but until recently unaffected by it, is the governmental apparatus. Economic stagnation, like its kin, corruption, occurred because the system failed to adjust to the emerging values of the populace, especially its best educated and technically most competent elements. Today Gorbachev is not creating change so much as uncorking it. The measure of his reform program is whether it adapts the party and government to the dynamic elements in Soviet society.

Fundamental shifts in Soviet society are going forward, and these increasingly define the national agenda. Since most recent analyses minimize this factor, a fuller review of the causes and character of the social transformations is in order

Among the causes, none is more fundamental than the rapid urbanization of the past 30 years. A rural society at Joseph Stalin's death in 1953, the Soviet Union today is only about 10 per cent less urban than the United States and about as urban as Italy. This change occurred in spite of official policy rather than because of it. Boldly defying severe residency laws and internal passport controls, peasants flooded into the cities.

This great migration marked the waning of peasant Russia and the passing of a controversial national archetype. Long-suffering Russian peasants are a fixture of both Russian and Western writing. For centuries they seemed to epitomize all that made their country different and distinctive—they bowed to authority, engaged in elemental and anarchistic rebellion, were natural communists in their village communes, and strove desperately to escape the extended family's despotic might. In the eyes of Slavophiles they were noble savages, and to westerners, a barrier to Russia's integration into the community of modern countries. Today, fewer than one in four Soviets is a peasant, and the number continues to plummet.

City air may not have made all rural migrants free, but it has emancipated their offspring. Sons and daughters of Russia's collectivized peasantry have plunged into urban life with a vengeance, pulling strings to get their children into the right schools, hustling for better apartments, and cutting deals for everything from seaside vacations to birth-control pills. In the process, the new urbanites have grown more independent than their forebears. Those who have gained access to the best goods and services can give credit as much to their own initiative as to the largess of the system. As their expectations rose they grew more critical. Dissatisfaction is more common in the city than in the poorer countryside and is greater in large and more affluent metropolises than in smaller centers, where the peasant mentality still holds sway. Responding to their new environment, Soviet urbanites assert their individual rights in the face of what officialdom sees as their collective duties. As this happens they cross, albeit unconsciously, the ideological fault line running in Western political theory between the writings of Thomas Hobbes, who stressed the

individual's need for security, and those of John Locke, who stressed the right to liberty.

Rapid economic development spurred this shift in outlook. Notwithstanding its recent stagnation, the Soviet economy remains the world's second largest and has grown faster than the U.S. economy through the postwar years. Millions of new jobs have been created, many requiring great expertise and sophistication. Important responsibilities have been entrusted to tens of thousands of people far outside the narrow circles of party, bureaucracy, and military that controlled national life in the Stalin era. No longer does the Communist party enjoy the relative monopoly on skills it had when the economy was smaller and simpler. Today's professional elite is for the most part staunchly loyal but far less beholden to the party and state bureaucracy than was its Stalinist predecessor. Brezhnev, by withholding from technocrats and intellectuals the rewards he extended to labor, hastened the growing autonomy of these elements.

Much of the initiative for change has shifted from the Communist party to society.

The Soviet Union still lags behind the United States on many key educational indicators, but progress in this area, too, has been significant. Advances in education have fostered the individuation and sense of autonomy unleashed by urbanization and economic growth. In 1987, 245 million people, or 89 per cent of the Soviet population, had at least a 10th-grade education. The comparable figure in 1939 was 10 per cent; in 1959 it was 32 per cent. As the number of those able to read has expanded, so has the number of those capable of reading between the lines. Millions are now acquiring and assessing critically information that their grandparents would have found utterly inaccessible, the object of fear or awe. Not surprisingly, the rising levels of education have been accompanied by a proportionate erosion of faith in the state's ability to organize and micromanage such diverse functions as medicine, specialized manufacturing, and the provision of services.

Paradoxically, the recent economic slump has

fostered the sense of individual autonomy that prosperity generated. As the sociologist Vladimir Shlapentokh showed in a 1986 study, applicants to Soviet universities now have less than one-half as good a chance of gaining admission as they did 20 years ago, and graduates have access to fewer positions in the ranks of bosses and managers. As the escalator of social mobility has slowed, especially at the upper floors, the young, educated, and ambitious increasingly have been thrown on their own resources.

The exercise of personal choice was once a privilege offered by urban life. Today it is a necessity. The State Planning Agency (Gosplan) may still bear formal responsibility for formulating comprehensive plans embracing all of the country's material and human resources, but in today's organizationally more complex environment it has lost the ability to carry out this task effectively. As a result, life decisions formerly made by the state—such as the selection of a career, employer, and place of residence—are either subject to personal influence or left fully to individual choice. The Soviet system of planning remains distinguished for its coerciveness and paternalism when compared with even the most socialized advanced industrial countries elsewhere. Compared with its own past, however, the Soviet system today devolves far more decisions to individual initiative.

All inhabitants of the peasant village knew where their neighbors were and what they were doing. But in the modern metropolis millions of urbanites rush about like unplottable electrons in an atom. Such circumstances have lowered the level of regimentation and surveillance the regime can expect to maintain. True, the Soviet Union remains a police state. Most of the laws and institutions created under Stalin are still in place. Now, however, the KGB has no choice but to focus its surveillance on a few individuals and groups. Many recent articles on criminality prove that police tactics often fail. That draft dodging could reach unprecedented proportions during the war in Afghanistan attests to the difficulty of operating a police state when the inhabitants are determined and resourceful in pursuing their own interests. The decline of fear as an instrument of control is both a cause and an effect of this situation.

Some future revisionist historian will remind the world how much Brezhnev and former Prime Minister Aleksei Kosygin did to reward the laboring men and women of the USSR. Whether from a sense of social justice or from concern that Soviet workers might follow the example of their Polish counterparts, they increased salaries steadily throughout their term in office. However, they failed to bring about commensurate growth in the supply of consumer goods, with the result that individual Soviet citizens had no choice but to salt away billions in savings accounts. Although total savings in 1960 equaled only 50 rubles for each Soviet citizen, by the 1980s this figure had risen to more than 600 rubles, equal to nearly three-fourths of the country's entire annual outlay for salaries.

This development, too, has advanced the process of individuation. For half a century Soviet workers were encouraged to identify with the progress of a command economy in which the state was the sole producer. Now workers with bank accounts of unspendable rubles have a personal stake in prodding the economy toward responding to their own demands as consumers. Of course, the government would be foolish to alienate the owners of so significant a source of investment capital.

When the regime has failed to produce desired goods and services, citizens have not hesitated to create them. Thus enters the twilight second economy, which is estimated to account for one-seventh of the USSR's nonagricultural output. Whether semilegal or fully underground, this privatized economy has come of age. Pioneered by young people 30 years ago, it now touches every segment of the population. Hence when Gorbachev talks of expanding the small private sector he really means extending legal legitimacy—and taxability—to areas of the gray or black markets. After all, as a former general administrator, he scarcely can be ignorant of the fact that industrial firms and communes throughout the Soviet provinces rely on the services of semilegal *sabashniki*, free-lance teams of builders and laborers who outperform their official counterparts in spite of bureaucratic harassment.

During the Brezhnev regime Soviet society moved steadily in the direction of individuation, decentralization of initiative, and privatization. A

virtual revolution in personal communications in that supposedly stagnant era dramatically strengthened these processes of change. V. I. Lenin and Stalin both labored to establish "top-down" vertical systems of communication. They nationalized and imposed strict political controls over such technologies as radio, film, sound recording, and modern postal services. More important, they limited or suppressed such horizontal technologies as the private telephone and the intercity telegraph. Their successors did the same with xerographic machines and desk-top computers. In the 1970s the USSR was the only country moving toward advanced industrialization that successfully braked the spread of private automobiles. All forms of international communication—radio, travel, mail, and telephone— were restricted or muzzled. As a result, society was left unable to communicate with itself. It was atomized and, in theory at least, rendered passive.

Extensive controls on the dissemination of information remain in effect today, yet millions of Soviet citizens routinely evade them. Over many years they have been astonishingly resourceful in their efforts to gain access to whatever information they desire. In the process they have taken advantage of such officially sanctioned major technologies as intercity telephones, whose number has increased rapidly but which are still in short supply. Equally important, they have skillfully exploited such seemingly innocuous "small technologies" as the cassette-tape recorder, the personal camera, the videocassette recorder (VCR), and the ham radio. In each case the state tried to suppress or strictly curb access to the new information technology. Outwitted by the public, it then sought a face-saving avenue of retreat. In the 1960s it had to reckon with a wave of illegally imported cassette-tape recorders that transformed their owners into publishers. The state then fell back on producing and selling its own. In the 1980s the process was repeated with imported VCRs. Eventually the Soviet government began producing its own VCRs in the hope that it at least could influence the use of a technology it no longer could prohibit.

By such steps the Soviet state lost its monopoly on information. A privatized system embracing large segments of the population now exists alongside the controlled official system of communications. What one Soviet writer, Vladimir Simonov, called "technotronic *glasnost*" was a fact long before Gorbachev took up the latter word for his own purposes. Thanks to this *glasnost*, or "openness," instituted by the public itself, members of Soviet society have gained the ability to communicate with one another and, increasingly, with the outside world. With or without official *glasnost*, few events in the USSR or abroad long escape notice. Even the darkest corners of Soviet history eventually will be illuminated by the more resourceful members of society, whatever the party and state may desire.

Improved communications have made possible a degree of "networking" among Soviet citizens that would have been inconceivable a generation ago. Controls over the freedom of assembly are still in place and enforced sometimes with extreme severity. Yet persons with common interests throughout the Soviet Union can readily locate one another and enter into communication by means of the legal and semilegal technologies available to them. Whether model-airplane enthusiasts, rock music fans, Hare Krishnas, Afghanistan war veterans, or ecologists, interest groups of like-minded people form with relative ease and establish regular channels of communication among their devotees.

By the early 1980s the initiative for ideas had shifted from state to society in a process of de facto democratization.

What began in the 1950s with networks of underground jazz fans spread in the 1970s to the sphere of public affairs. The Communist party newspaper *Pravda* acknowledges the existence of more than 30,000 *neformaly*, grass-roots voluntary associations dedicated to various types of civic improvement. What Western political scientists call "interest group articulation" reached a record high in August 1987, when a conference of some 600 politically oriented clubs and associations—in this case, all nominally socialist in their program—convened in Moscow under the aegis of the city's party boss at the time, Boris Yeltsin.

The existence of such entities testifies to the ability of the Soviet people to generate ideas in-

dependently on virtually any topic and to air them broadly. It also confirms that the state's powers to form and inculcate social values from above are strictly limited. This sea change took place in the arts more than a generation ago and in recent years has occurred in many other areas of endeavor. Although manifestations of official ideology remain ubiquitous, by the early 1980s the initiative for ideas had shifted from state to society in a process of de facto democratization. In the sphere of ideology, this democratization has been accompanied by a de facto secularization, in which revolutionary myths retain their status and even some of their evocative power but have yielded much of their day-to-day relevance to that yeasty body of ideas being generated by, and circulated among, the public at large.

The void left by a waning ideology is filled by an ever more assertive and potent public opinion. The growing importance of public opinion can be gauged by the progress of efforts to measure it. Tentative contact with American public-opinion research firms was made as early as the 1960s. The legitimation of sociology as a field of research was achieved in the 1970s, by which time Soviet newspapers and official organs had begun analyzing public opinion to seek feedback.

The ability of Soviet public opinion to influence decision making is exemplified in the field of ecology. The conquest of nature has been a sacred ideal of Russian communism since before the revolution. Yet when government agencies proposed over the past decade to divert water from Siberian rivers to water the arid steppes of central Asia, educated public opinion succeeded in killing the project. In 1987 a water-control scheme for the Kamchatka Peninsula was thwarted in the planning stage by local activists, many of them blue-collar workers.

As public opinion gained in strength it grew in diversity. The public's increased facility at networking has brought to the fore a bewildering range of views on virtually every issue of the day. That some virulent forms of Russian nationalism, extreme by any standard, are among them is not surprising, since the USSR lacks the regularized public forums at which advocates of maximalist positions might moderate them through interchange with people representing other views. But even the most extreme manifestations of public

opinion are important because they attest to the living diversity and pluralism beneath the surface of the "unbreakable unity of Party and people" today in the USSR.

Becoming a "Civil Society"

These, then, are some of the fundamental changes that took place during the otherwise stagnant Brezhnev era. Together they constitute part of the social reality that the Gorbachev administration will ignore only at its peril.

Clearly the new tendencies in Soviet life will soften many features of the social system forged by Lenin and Stalin. The old society's tendency was for everything outside the party and state apparatus to be turned into an amorphous mass, the whole country becoming "as if déclassé," in the words of the historian Moshe Lewin.[1] The emerging society, by contrast, includes large numbers of autonomous and assertive personalities among both the rulers and the ruled. The sense of duty that the late anthropologist Margaret Mead found so characteristic of the Soviet public under Stalin is being balanced by millions of individuals actively trying to affirm their rights under law. People who formerly viewed themselves as subjects are taking on the mentality of citizens.

Gorbachev has declared his goal to be the democratization of society. But Soviet society already has moved far in this direction thanks to developments fostered or tolerated by his predecessors. The key question is whether the party and state will follow suit. To the extent they do, the Soviet Union will move toward becoming a radically different type of society than it has been for 70 years—namely, a "civil society."

This concept has a rich history in Western political thought, most notably in the writings of Locke, Alexis de Tocqueville, and John Stuart Mill. It is grounded in ideals of citizenship under law; in freedom of speech, of the press, of assembly, and of worship; and in the protection of minority rights under majority rule. Above all, it holds that society is distinct from government and that government is but one of several institutions coexisting in a pluralistic social fabric.

So greatly do these ideals differ from the cur-

[1] *Moshe Lewin*, The Making of the Soviet System *(New York: Pantheon, 1985), 265.*

rent situation in the Soviet Union that it might be tempting to dismiss as utopian all talk of civil society there. The Communist party still exercises a degree of control over the citizenry that is antithetical to notions of civil society. Whatever melioration has taken place in recent years has occurred de facto and not de jure.

It might also be objected that the very idea of civil society is too narrowly Western in origin to be applied appropriately beyond Western Europe and North America. Clearly civil society in the Soviet Union will be shaped by Russian traditions, just as those in Great Britain and France bear the very different mark of their national heritages. Starkly different structures, however, can fulfill similar functions. To acknowledge the differentness of Russia's political heritage does not disqualify it from experiencing evolutionary change. For someone in 16th-century England, 18th-century France, or 19th-century Japan to have claimed that those countries would someday become civil societies would have seemed no less outrageous than for someone to make a similar claim today for the USSR.

Russians themselves have drawn attention to the signs of a national shift toward a civil society. Writing in the twilight of the Brezhnev era, the late dissident author Yevgeny Gnedin observed, at the very time the party and state apparatus were growing more sclerotic, that

> society gradually comes to life and grows pluralistic. One can observe the beginnings of a not-yet-mature political pluralism . . . a diversity of outlooks. This ferment in society, proceeding without *glasnost*, does not mean that there is no philistine inertia, no inertia of obedience to the powers-that-be. Yet, this intellectual and spiritual diversity . . . is the sign of a search for a way out of the labyrinth.[2]

Many recent statements by one of Gorbachev's advisers, the sociologist Tatiana Zaslavskaya, and by the influential publicist and political scientist Fyodor Burlatsky, more fully develop these same ideas. The latter has declared that "not so long ago we were afraid of [pluralism]. It seemed to us that it had an exclusively bourgeois flavor. But the development of pluralism in our country is a real fact. Glasnost itself . . . is a manifestation of pluralism."

[2]*Yevgeny Gnedin*, Vykhod iz labirinta *(New York: Chalidze, 1982), 117.*

Arguably the most astonishing utterance from any member of Gorbachev's inner circle was Aleksandr Yakovlev's declaration last year, that the Soviet Union "should operate more by the common law principle that everything not explicitly forbidden by law is permitted." As if acting on the general secretary's advice, Soviet courts in the first half of 1987 sent back more cases for further investigation, handed down more acquittals, and threw out more suits than in any previous 6-month period in Soviet history. Such words and deeds would seem to reflect an understanding of civil society at the highest levels in the Kremlin.

Yet the suspicion remains that Gorbachev's démarche toward the new social realities is merely a tactic. What will happen when *glasnost* is directed not against the Brezhnev legacy but against Gorbachev's own record? How quickly will his administration pull back when the extension of openness to non-Russian peoples in the Soviet Union unleashes centrifugal forces incompatible with Great Russian pretensions? And how sharply will Gorbachev shift directions when the cycle of reform is played out, as must inevitably happen?

Such questions are intriguing but premature. Most of the announced reforms, particularly in the crucial area of law, are still being prepared. Until the first drafts emerge it will be impossible to determine how much substantive wheat is mixed with the rhetorical chaff. But there are serious grounds for doubting that legislation embodying principles of a civil society will get very far. First, Gorbachev has declared his commitment to maintaining all the inherited prerogatives of the Communist party. Second, he fully shares the traditional Marxist opposition to private property. Indeed, his limited acceptance of a private sector seems designed more to co-opt the unruly second economy than to affirm the right to property that Locke posited as the basis of citizenship in a civil society.

Third, and most important, Gorbachev's highest priority is not to introduce liberal reforms but to revive the bedraggled Soviet economy. That administrative decentralization and sharp staff cutbacks in planning organs spell disaster for thousands of bureaucrats is well known. Less often noted is the way the economic reforms might

hurt the interests of labor. To put it bluntly, Gorbachev's economic program contains many facets that, if crudely imposed on the Soviet public, would sour the atmosphere for reform in other areas. How, after all, is a Soviet worker to view proposals calling for deregulation, the suspension of wage and price controls, the expansion of the powers of local managers, compulsory job reassignments for millions of blue-collar laborers, and the stretching out of salary scales for the purpose of rewarding diligence and punishing sloth? The economy may desperately need such measures, but to the Soviet worker they can only appear as a speedup.

Any other reforms put forward when such controversial measures are being implemented will be tarred with an antilabor brush. If the economy fails to respond to Gorbachev's stimuli—and 1987's results give little reason for optimism—then many common Russians will pine for the good old days when labor was not punished for the country's economic malaise. That serious problems with poverty and unemployment in the USSR are only waiting to be discovered by the public simply adds to the risks. It will be all too easy to draw the conclusion that the inevitable price of political freedom and civil rights is an unacceptable level of economic inequality. If embittered bureaucrats forge ties with alienated labor, the reform program will face formidable opposition that will test Gorbachev's powers as a political broker.

Reviewing such arguments, some Western observers have begun penning Gorbachev's political obituary and have written off the prospects for basic change in the civic sphere. In rushing to the latter conclusion, if not the former as well, they reveal the analytic bias discussed earlier. Such factors as the erosion of planning, the progress of decentralization, the spread of privatization in the service sector, the information revolution leading to openness, and the overall individuation of society—what Gorbachev calls the "human factor"—all call for a different perspective, one emphasizing change from below rather than from above. At issue is not whether such fundamental developments will be erased or thwarted, but when, to what degree, and by what political processes the ruling party and government will make their peace with them.

It might be argued that it is not too late for these changes to be reversed and for the political superstructure thereby to escape their effects. This scenario is possible, but its cost rises daily. Citizens in a civil society are less malleable and less subject to manipulation by the state than subjects under an authoritarian regime. And as society becomes less malleable, society and the state grow more interdependent, each gaining the power to limit and influence the other. Since the state has long wielded broad power over Soviet society, the focus of change today is for society to gain reciprocal powers over the Soviet state—that is, to reach a condition in which "every branch of [the] civil policy supports and is supported, regulates and is regulated, by the rest," as the 18th-century English jurist Sir William Blackstone wrote in his *Commentaries*. In July 1986 Gorbachev himself decried those "who try to put the Party and society at loggerheads." If he is to avoid this, Gorbachev must take steps to accommodate the system to the new social reality.

The thesis presented here holds that profound changes have taken place in Soviet society and that these changes eventually will exert an influence upon both the traditional institutions of government and what George Kennan, in his "Mr. X" article in *Foreign Affairs* in July 1947, called "the mental world of the Soviet leaders." Only time will tell how deeply these new conditions will alter the political superstructure. But to the extent that Soviet leaders resonate to the new social forces, they are bound to behave differently from their predecessors in the international arena, particularly in the U.S.-Soviet relationship.

This is not to suggest that a complete transformation looms on the horizon. Just as certain continuities persisted from czarism to communism, some features from the eras of Lenin and Stalin undoubtedly will carry over into future U.S.-Soviet dealings, especially after the current "breathing spell" has passed. Indeed, as Gorbachev has noted, the tactic of a breathing spell is itself an inheritance from Lenin's thought.

Soviet leaders will continue to view their country as a superpower and to claim the prerogatives of that status. As other major powers emerge, the price tag for maintaining this lofty self-image will rise. Yet the Soviet government will surely continue to assert itself globally in behalf of friendly

governments. Gorbachev's stated desire to turn inward has nothing to do with the rise of civil society as such. Many of the last century's great colonial powers were among the most developed civil societies of their time.

Gorbachev frequently has asserted his belief in the priority of domestic over foreign affairs. This may be a convenient way to present the rival claims of guns and butter, but it oversimplifies the nature of foreign policy under civil societies. The academician Yevgeny Primakov's reference to the "organic link" between domestic and foreign affairs, cited in the July 9, 1987, issue of *Pravda*, states the relationship more accurately. He might have added that, as Karl Marx predicted of bourgeois states, the relevant domestic issues are the country's economic interests.

To succeed politically within the new social context, the Kremlin's foreign policy must be seen by the Soviet public as serving its interests and not just those of the Communist party. Foreign-policy initiatives must pass muster with domestic public opinion, including the opinions held by both the cosmopolitan and the more chauvinistic sectors of society. And while Kremlin leaders will feel the impact of public opinion on their foreign policy, they will have fewer ways of influencing such opinion than in the past.

At the negotiating table, therefore, Soviet leaders will have less freedom of action than before. Kennan also observed in his Mr. X article, written in Stalin's day, that the Kremlin's diplomats are "under the compulsion of no timetable." The activation of civil society already has begun to change this situation, as Gorbachev's impatience for progress in arms control talks over the last year and a half demonstrates. Short-term diplomatic triumphs and defeats gain more meaning in civil societies than in closely controlled societies. Soviet negotiators in the era of the strategic arms limitation talks expressed frustration over what they considered the mercurial nature of American politics. As they are compelled to become more closely attuned to their domestic pulsebeat, Soviet policymakers probably will also be less relentlessly consistent in their actions, more preoccupied with tactics, and thereby more concerned with the art of the poker player than that of the chess master.

At various times both America's hard-liners

and its soft-liners have found it convenient to argue that the United States can exert little influence on Soviet international behavior. However, America's impact on Soviet life will grow with the emergence of civil society there, since the decline of the USSR's economic autarky is accompanied by the waning of its cultural and psychological autarky as well. Americans—both elected leaders and the public—will be able to appeal directly to Soviet public opinion, just as Soviet leaders have done so frequently in the United States. The element of uncertainty in the U.S.-Soviet relationship will therefore expand and place a premium on the ability to manage tensions as they arise.

These potentially destabilizing factors will be offset to the extent that Soviet leaders, compelled to respond to their own domestic constituency, are better able to appreciate the constraints under which their American counterparts labor. Approaching America with the benefit of their mounting acquaintance with civil society, Soviet leaders will be less inclined to seek the sources of American behavior in the machinations of Wall Street and more disposed to appreciate the presence in modern societies of what de Tocqueville called "a kind of intellectual atmosphere in which both governed and governors exist and from which they draw the principles of their conduct."[1] During the Stalin era Western diplomats often noted with dismay that Soviet leaders understood long-accepted concepts of international relations quite differently from Western leaders, thus impeding communications at the most basic level. To the extent that the USSR evolves in the direction of a civil society, words may regain some of their common meanings. This in itself does not guarantee U.S.-Soviet accord, but it is essential for maintaining purposeful dialogue between the two governments.

[1] *Alexis de Tocqueville*, Oeuvres complètes (*Paris, 1864–66*), *vol. 9, 123.*

© *1988 by the Carnegie Endowment for International Peace. All rights reserved. No part of this publication may be reproduced in any form without permission in writing from the publisher.*

The CHAIRMAN. Thank you very much indeed, Dr. Staar. I would like to throw out a general question for your comment, but I think many of us who have been following the affairs in the Soviet Union or have lived behind the curtain have felt that the system of communism is an unnatural system that can only be maintained by the use of force that went against human nature and the desire of human beings to worship freely, travel freely, work freely, pile up a little money for their children, et cetera, et cetera. These are basic drives in homo sapiens.

And I was just curious if—why are we all of a sudden discovering that this is a fact at this point? In my mind it has been inevitable for a good many years, and some of us have been saying so. Why are we so startled at what is going on? What would be your reaction, any of you? Dr. Staar.

Dr. STAAR. Well, I believe that both extremes of our political spectrum has an interest in not perceiving this, and in not acknowledging this reality. On the one side we had those who were considering the Bolshevik revolution to have been a mistake and a crime; and they were busy stressing to us the power of ideology to reshape people and claiming that somehow the Soviet people were being turned into automatons.

On the left side of the political spectrum people were concerned to show the inevitability of the Bolshevik revolution and therefore of all that followed from it, or at least from the ideology that impelled it. Together, these two positions prevented us from looking at Soviet society headon as I believe we are being forced to do today.

Prof. RA'ANAN. Senator, I believe that there is a third group between optimists and pessimists, and that is realists. There is no evidence that the drive for decentralization that is occurring is necessarily irreversible. To take what is happening just now in Georgia alone: there is massive repression. There are large numbers of casualties. The area is out of bounds to foreign visitors. There are enough forces in place that are determined not to see the disintegration of the Soviet empire. By the "empire" I mean the Soviet Union itself at this moment.

Red Star: Not a day passes without the Red Army's newspaper threatening the autonomist movements, saying that young Russian servicemen are yelled at with cries of "Occupier, go home" and that the army will have to do something about it.

This is the first time since 1957 that the Red Army is calling for its own independent political line. These forces of repression are strong, and they have been exacerbated by the sight of truly independence-minded people. In the latter context, I do not know if you say the Sixty Minutes interview that Mike Wallace did with the Estonians. It was a startling phenomenon.

There are many people in powerful positions who will not accept this, display of independence, so reversals not only are not impossible, they may be very high indeed on the agenda.

The CHAIRMAN. Thank you very much.

One other question because I do not want to use up my full 10 minutes because we have a lot of us here. But in connection with perestroika, which I think all of us who are serious students should have read and have read, I am struck by the fact that he leapfrogs

over the Stalin days with a couple of references and then focuses on the Lenin days.

I am wondering if you believe that the reason for that is that Gorbachev must cloak his ideology in something of respectitude for the Russians and for that reason wants to fly under the Lenin banner. To my mind, the book "Perestroika" is particularly important because I believe it is so poorly written ti must have been written by him personally in the sort of stream of consciousness technique that you feel really was produced when he was off by himself those 2 months.

Prof. RA'ANAN. The references to Lenin are obligatory because of questions of legitimation.

The CHAIRMAN. You do not think it is because of the new economic plan at that time that he latched on to the market economy for that reason?

Prof. RA'ANAN. That, of course, is one factor, but the other factor is if you are going to denigrate your predecessor, Brezhnev, and his predecessors, and Stalin before them, then where is the legitimacy of the regime, and the answer is that it can only be found in Lenin himself.

I think this is the most urgent aspect.

Dr. LEGVOLD. If I could comment on the same question: It is important to understand that General Secretary Gorbachev and others supporting perestroika repudiate not only Stalin, but Stalinism. That particular version of the revolution was, they feel, not only excessive in its own day, but enormously counterproductive in our day, and they mean to undo it.

On the other hand, in terms of Gorbachev's return to Lenin, I believe that is genuine. I see the General Secretary as, if you will, an idealist in a sense. That is why I made the point I did about his sharing many of the basic assumptions or points of departure of Khrushchev.

This is important because we must understand that Gorbachev is not a part of what is becoming a mounting chorus within the West, that the grand experiment has failed, and that in effect the Soviet experience and the ideas that underlay it were a fraud and a failure. That is not where he starts.

He starts with the intent of returning to something that was pure. Now that, in turn, allows for very considerable adjustment of concepts and dogmas as both Dimitri and Fred have suggested. But we need to focus on both sides of the issue, the idealism as well as the capacity for enormous adaptation. It is, however, the adaptation that we ought to be responding to in our foreign policy.

The CHAIRMAN. Thank you very much. I will desist now and turn to the ranking minority member.

Senator HELMS. Thank you, Mr. Chairman. It is a given that Mr. Gorbachev is probably the most notable PR man in a long time. But I think we need to have some questions answered that puzzle me.

Dr. Ra'anan, for example, would you detail for me your view of Mr. Gorbachev's personal role in the nationalities crisis that you talked about?

Prof. RA'ANAN. Yes. Very recently on April 9, if I remember correctly, he as chairman of the Presidium of the Supreme Soviet

added a number of edicts to the Soviet Criminal Code, and there were severe penalties that were added for public insults or the discrediting of state bodies and officials as a result of statements that kindle interethnic hostility. In other words, the autonomous movements to the extent that they express a desire for self-government but much more for independence and hold demonstrations, those demonstrations in themselves, even if they are peaceful, are now under this new edict punishable.

This was himself. This did not come from somebody else.

The second case that I briefly mentioned, of course, was his position in Armenia in what is very interesting about the man is that he is extremely thin-skinned and flies into rages from time to time. It is a sight that has not been seen much outside.

He went to Armenia and the people there said "Look, you have come to see the victims of the earthquake. But you know why we have these victims. Because we have 170,000 refugees from Azerbaijan where Armenians are being killed. So, please enable us to reunify with those parts of Azerbaijan where Armenians are in the majority because these refugees by coming were housed in rickety buildings which were the very first to collapse when the earthquake struck."

He was so infuriated that his gesture in coming to see the victims was being questioned and that people were raising political issues that he rushed back to Moscow and there then followed a spate of attacks that could only be called ethnic or racial that Armenians are the kind of people who rob their own dead and dying when they are under the ruins and pull off fingers from the corpses of dead people and so on. And then he dissolved the Nagorno-Karabakh committee as I mentioned earlier, and it is still in prison. All this because of being very thin-skinned, of having kind of personal egocentric vanity which is not uncommon in some of his predecessors. And in that case, as in many others, he reminds me of Nikita Khrushchev with all the differences that exist.

Senator HELMS. Where did you learn about his explosive temper?

Prof. RA'ANAN. The Soviet press covered this. They covered his rejection of national claims when he was in Armenia, his sudden suspension of that visit, rushing back to Moscow.

Senator HELMS. I see.

Prof. RA'ANAN. It is all in the Soviet press. My problem is——

Senator HELMS. I see. I just take the Washington Post.

Prof. RA'ANAN. My appeal is that Moscow correspondents occasionally should read the Soviet press.

Senator HELMS. Well, how long is he going to last, in your judgment, under the disintegrating circumstances that you have described?

Prof. RA'ANAN. He is a very able man and a very sophisticated man. I believe, unfortunately, with great regret, that we are really on the brink of suppressive moves, for all the reasons that I mentioned before. And the needed forces are in place. Rather than have someone else do it for him, on the excuse that he himself unleashed the autonomist movements by glasnost, et cetera, I am certain Gorbachev will take the lead in unleashing suppression himself.

Senator HELMS. And you think the Red Army will take over then?

Prof. RA'ANAN. It will be largely these new "special detachments" of the Ministry of the Interior, with the Red Army as a back up, particularly in the Baltic. The Baltic Military District has its headquarters in Riga.

Senator HELMS. Well, I do not want to belabor the subject, but what do we have here? The Communist party, which is the government over there, can it not trust itself as a control mechanism any longer? Is that it?

Prof. RA'ANAN. That is correct. The Lithuanian Communist Party has been co-opted by the local national autonomists to the extent where in the last elections they were not putting up candidates against one another. The nationalists refrained from competing against the first secretary of the Lithuanian party, saying he is a good guy, he is in our pockets.

Senator HELMS. During the ethnic conflict between Moslem and Christian nationalities, such as between the Azerbaijanis and the Armenians, the Soviet regime has tilted to the Moslem side. Is that right?

Prof. RA'ANAN. That is correct, Senator.

Senator HELMS. Now, how do you account for that?

Prof. RA'ANAN. I think in part because the Moslem population is increasing by leaps and bounds. It increased by 86 percent between 1959 and 1979, whereas Russians increased by 18 percent during the same period. And it is now showing itself in terms of the intake of recruits, where as many as 40 to 42 percent of incoming recruits are from the Moslem republics.

And I think this is one of the reasons why Mr. Gorbachev announced the military cut back, because if he continued with a full-scale draft at the moment, very soon he would have a Moslem army. And this is simply not acceptable.

Senator HELMS. Dr. Staar, did you want to comment on the questions?

Dr. STAAR. Well, I think we tend—I think we flirt with apocalyptic notions of all this. I think we lose from sight that there are federal alternatives to total disintegration or total unification by force.

I think we all hope that there are level heads in Moscow who will explore federal solutions. They do have a rich tradition, submerged, to be sure, but a rich tradition of federal ideas in Russia and in Soviet history.

And if these are brought to bear, then there could be a workable outcome without complete disintegration or a totalitarian reintegration.

Senator HELMS. Maybe we ought to ask Dr. Simes.

Senator PELL. The committee will recess at this point because there is a rollcall vote taking place. And whoever in the majority comes back will reconvene.

[Pause.]

Senator PELL. The committee is not in recess. Senator Moynihan is here.

Senator MOYNIHAN. If our distinguished panel will forgive me, I should like to catch up with where we are. I have been required to be on the floor with respect to the amendment now being voted on.

And not having been here, I take it you have made your presentations. I have read them, but I am not in any position to hear what each of you is saying. But we have ample time, and I was wondering whether there are some comments that any of you would like to make or further observations that you had in mind.

You are uncharacteristically muted, Dr. Staar.

Dr. STAAR. If I may say, I think among our panel and among thoughtful observers of the Soviet Union today, there is a difference, and a basic one, between those who see the fundamental currents in that country to be coming from the top, and hence, subject to the fate of whoever is at the top, and those who emphasize, rather, the deeper forces in the society that might be moving them through this process of reform.

We have had serious presentations that emphasize both. I think, though, that there is agreement among those of both views that ideology as it once existed in the Soviet Union can no longer be the instrument of control that it was formerly.

Senator MOYNIHAN. Dr. Ra'anan does not necessarily agree.

Prof. RA'ANAN. No. I agree to the extent that ideology long ago ceased being taken seriously by the elite, as a goal to be achieved, or by the masses, as a concept that was to be believed.

However, the leadership used the ideology for two purposes: One, as a way of self-legitimation. Why am I in power? Why did I overthrow my predecessor? Mr. Brezhnev, after all, put Khrushchev in dacha arrest. Why did I do it? Because the voice of history, the ideology showed me that I was right, and he was wrong. And so this is one part.

The second part, the ideology is really not too bad as a tool for interpreting and analyzing international relations. There are worse analytical tools than the Hegelian dialectic.

But, as a goal to be achieved, I think that the ideology died in 1918 when Lenin was asked whether "we should sacrifice our Soviet base in order to bring the revolution to Germany." And he said, "Well, perhaps one should, but then, after all, nothing is as important as our domestic power base."

I think on that day the ideology started dying.

As far as the masses are concerned, they are absolutely cynical. They go to these compulsory lectures in factories, because it is a wonderful way of napping off for an hour, or just goofing off from work.

And, of course, you know the famous joke in Moscow: We have an agreement with our government, they pretend to pay us, and we pretend to work. And I think that shows you some of the apathy.

So, I do not think this is new. I think it has lasted for decades, this disenchantment with the ideology, as something to be taken really seriously.

And I think someone said earlier on that you probably have more dedicated Marxist-Leninists in some Western cities than you have anywhere in the Soviet Union, with the single exception of primary school teachers like Mrs. Andreyeva who wrote a notorious anti-Semitic and Stalinist article on behalf of Pamyat.

She is a primary school teacher, or maybe even a junior high school teacher. She still believes it all. But, in her mind, it is all mixed up: Anti-Zionist, anti-Masonic, long live Stalin, and actually, the tsar was not too bad either.

Dr. SIMES. Let me comment if I could, Senator.

Senator MOYNIHAN. Could I just interject one thought, Dr. Ra'anan? I may have a really serious difference with you there. I think there is no worse thing than a Hegelian dialectic. I mean, I have struggled with it for these 62 years and to no consequence at all.

Prof. RA'ANAN. Touché.

Senator MOYNIHAN. And especially a Hegelian dialectic stood on its head; that is even harder. Even rightside up it is very complex. Dr. Simes.

Dr. SIMES. My impression is that ideology today in the Soviet Union is no longer, as Fred said a minute ago, useful as a political tool.

Now, of course, in the past, it also was discredited. I do not think Brezhnev took it too seriously, I do not think the people took it too seriously. But it was at least a convenient organized religion; no more.

I think that, if anything, Gorbachev was very successful in destroying old beliefs, old mechanisms of power, and the old way of running the economy.

Senator MOYNIHAN. Gorbachev?

Dr. SIMES. Gorbachev.

In my way, they cannot go back. I do not know what will emerge out of this semichaotic political process we are witnessing today in the Soviet Union, but if they will have to go back to repression, they will, like in Poland, have to rely more on tanks and less on provincial party secretaries.

It may be a very reactionary and repressive authoritarian regime, as in Chile, but I do not think they can go back to their pervasive totalitarian past. I do not know whether it will be better; it will be different.

Senator MOYNIHAN. Dr. Legvold, did you want to say something?

Dr. LEGVOLD. A quick comment, because I may be the only one on the panel, from the way I understand the discussion, who believes that in fact ideology continues to live in the Soviet Union, but that is because I have a different notion of what ideology is all about.

If your notion of ideology is the original doctrine, the tablets of stone from the documents in the early part of the 19th century, and the formal party documents that came out of part conferences subsequently; that is, the primitive doctrinal notion of ideology, then they have moved very far from that, and they are very uncomfortable with the implications of much of it.

But if your notion of ideology is, in a larger sense, a belief system, the way in which they structure their beliefs, a belief system that was originally informed by doctrine that has been affected by a series of intervening experiences, then from my point of view, there is still an important integrity to Soviet concepts.

There is a way in which Gorbachev's view of the world, his view of us, of capitalist society, his notion of socialism, even though he is

anti-Stalinist, it does derive from ideology. Ideology is not just a tool or an instrument to be employed; that is to suggest that they can get outside their skins.

To put it another way, Deng Xiaoping has said of Marxism or socialism, when asked what it is, he said "It does not matter whether the cat is black or white, as long as it catches mice."

There is no Soviet leader at this stage within Gorbachev's circle that is prepared to express that level of pragmatism, or that level of independence from their notions of how the world works.

That does not mean there are not enormous changes in the way in which they think about everything, from internal development to foreign policy. But I think it is a mistake for us to assume that ideology, unless we are talking about it in the very narrow, primitive doctrinal sense, is not a force within that system.

Because the implication of that is to argue that the Soviet leadership is and has been, in the most fundamental sense, cynical; not cynical in the more superficial sense in which we understand cynicism in that society.

Senator MOYNIHAN. All right, sir. Let us see if we cannot walk through a few of these things, because this is an extraordinarily important set of hearings we have.

First, just one not so essential but interesting proposition. Dr. Simes spoke of the behavior that we might expect from an authoritarian Soviet government. Does it appear to you that we are in fact seeing the emergence of an authoritarian regime out of a totalitarian past, in opposition to a supposed rule that such evolutions cannot take place?

Dr. STAAR. If I may comment. From the American standpoint, which in this regard is similar to a British standpoint, most continental systems have always looked very authoritarian. France is far more centralized a state, and has also had a much larger role for the government than we consider acceptable.

That Russia is moving toward a more authoritarian and less totalitarian regime seems to me clear. And they do have, obviously, a strong tradition of centralization.

Senator MOYNIHAN. What seems clear to you then, sir, is something that not 10 years ago was declared to be impossible.

Dr. STAAR. I think we should then consider the possibility, which is growing, that it is one in which pluralism is de facto a reality in the U.S.S.R. The society has organized itself, independent of the state, to bring to bear diverse opinions on issues of public policy.

Senator MOYNIHAN. You certainly would accept the loose notion that the tsarist regime was authoritarian? And Pravda was published in Petrograd, in Saint Petersburg, and appeared daily on the streets thereof—which is a characteristic of certain kinds of authoritarianism.

But, does the panel sense that there is a huge issue here.

That is to say, this century was the age of the totalitarian state? The species had no such experience. And some circles came to the view that once established, the totalitarian state is permanent. The proposition was that an authoritarian state sometime evolves into a democracy, but a totalitarian state never does; it never evolves even into an authoritarian one.

Do you think that proposition is somehow disproved by events? It is a pretty important proposition.

Prof. RA'ANAN. Senator, I would plead that it is simply premature to draw any conclusions. I do not see a unilinear development. I see normal zigs and zags.

And at the moment, we are in a zag which looks very retrogressive.

The Minister of the Interior, Bakatin, has just given an interview about these "special detachments" that the ministry has set up to deal with various groups that are not behaving themselves. And he says we have "to deal with" certain formations—he is talking about the "popular fronts" about these grassroots units, which pursue "nationalist, separatist, antisocialist, and other anticonstitutional goals"—you know, that is pretty all-embracing—and against whom force should be applied.

And then he goes on to say, "we have to prevent demonstrations, rallies, pickets, and congresses," no hint in this at all that they will be suppressed only if they are not peaceful; just they will be suppressed, period.

And, of course, this is what happened in Georgia. That was originally a very peaceful demonstration, which turned suddenly into something else. I am not saying we are going full steam backward. We don't know. But there enough setbacks, and they occur frequently enough to lead one to suspend judgment on that point.

I must also add one other factor, and that is the central organs of the press, which had been proceeding in fairly unilinear ways until approximately December, toward more and more openness, more and more readers' letters, more and more unorthodox opinions. In the last 2 or 3 months they have suddenly tightened up. They have not gone back quite to where we were 5 years ago, but they have gone back quite a bit.

Senator MOYNIHAN. Let me say, on that point, it is one thing to have alternations and policies. But the ideological base of policy, if it has changed once, has probably changed for once and all.

As you know, last week your distinguished colleague, Ambassador George F. Kennan, was here. And you are familiar with his reports. I think you probably generally share them. But it was he who sent the long telegram from Moscow in 1947, followed by his article in Foreign Affairs, which forecasted the period we have lived through.

There is a passage in that article which our very distinguished New York journalist and columnist Lais-Erik Nelson retrieved for us. That is Kennan's statement that it was essential to the Soviet leadership that their doctrine seemed to be fixed and settled and impervious to falsification, truth, and ideologically and doctrinally true.

And that was the striking thing, at least to this committee member, to listen to Mr. Gorbachev's speech to the United Nations on December 7. Of course much attention was given to his statement that he was going to bring home 10,000 tanks. And sometime the next day the Secretary of Defense said to me, "Yeah, what tanks? Old tanks, I bet you." You know, that kind of thing.

I was much more impressed by his statement that earlier on he said, "We are, of course, far from claiming to be in the possession

of ultimate truth. Well, that, of course, is exactly what they had been claiming for 70 years and more. And it would seem to me that you cannot reverse a statement like that. Once you have said it, it is over.

And then an era is over in that very moment. And the things that we have learned in the Soviet press, up until perhaps December as Dr. Ra'anan says, you know, it established that their workers' paradise for 70 years was in fact a criminal regime.

Now I am the gray-haired one amongst us today, I think. And I can remember the endless debates in my native New York City on the death of Trotsky. Can he have been assassinated? Of course he could not be assassinated. Well, who killed him then? Well, it went back and forth and back and forth.

And now we read in a Soviet journal the name of the KGB agent who arrived in Mexico City and the amount of money he brought to give to the person who was assigned to do the assassination.

Well, you cannot retrieve that earlier era. I mean, you could go on to other things and worse things, more brutal if that is possible; as unattractive in special ways as, for example, a wholesale repression of nationalist sentiment and things like that.

But you cannot go back to the claim to be the next stage in history. Can you? I put to you a rhetorical question; I do not assert that.

Dr. SIMES. I think you said something extremely fundamental: that there can be a return to repression; that there can be certain zigzags. As a matter of fact, they are inevitable. Once you put an end to totalitarian homogeneity, once people begin making demands, the regime is bound to react and there is going to be blood.

And I think that probably they killed more people under Gorbachev than under Brezhnev, certainly per year, simply because there is more——

Senator MOYNIHAN. More people in the streets.

Dr. SIMES [continuing]. More people in the streets because there is something happening the regime feels compelled to respond to. But you know, in a way, it is like 1905, when the tsar, for the first time had to accept that absolute monarchy will be no more; that he had to share power; that people would have a certain voice in running the country.

Now, after that, of course, there was revolution, there was repression, there was counterrevolution, but it was a different country.

And that, I think, is what we are witnessing today in the Soviet Union.

Senator MOYNIHAN. So, you would generally agree with the rhetorical point that I had just made?

Dr. SIMES. Absolutely.

Senator MOYNIHAN. I see.

And Dr. Ra'anan, Dr. Staar, you do not have to agree or disagree, but in that theme.

Prof. RA'ANAN. No one in his right mind would say that nothing is happening in the Soviet Union. Of course, there are some extremely dramatic developments. My point is simply that at this point it is very premature to say where they are going.

And from a purely foreign policy point of view, and here I do not disagree with my colleague, it may very well be that whatever

takes the place of the current situation may be more dangerous, less stabilizing.

Senator MOYNIHAN. The Austro-Hungarian empire in decline was not a great blessing.

Prof. RA'ANAN. It helped to unleash World War I. So, there is a serious problem here.

Senator MOYNIHAN. But the Austro-Hungarian empire was different from a regime that claims the next stage in history; was it not? The Soviet Union made that claim on people around the world. We have had a half century in which men and women would live and die for that claim. Is that not over?

Dr. STAAR. I emphatically agree with you. I also think the notions of Soviet society that we adopted in those years are also over. We came to view these people as passive, somehow conditioned by their rural peasant communal past, to the exercise of unlimited authority over them, and so forth.

Well, if that was ever true——

Senator MOYNIHAN. I think I learned early in life that the plains make for oppressive government; is that not right? Mountains make for free men?

Dr. STAAR. That is the kind of idea. If any notions like that were ever true, I think we know enough of what has happened to Soviet society in recent decades to be confident that such passivity will never be there again.

Senator MOYNIHAN. All of these are just suggestions and I recognize that 1905 did not lead to a more peaceable time—Dr. Ra'anan, I think said that. Which of you said that there has probably been more bloodshed under Gorbachev—Dr. Simes did—than under his predecessor.

Dr. Legvold, do you want to comment?

Dr. LEGVOLD. Well, I am trying to understand what this part of the conversation means. If we are discussing this because we regard the possibility that the Soviet experience now, coming out of perestroika could somehow slip back to a sort of Stalinist repression and totalitarianism, then, in my view, one should attach a very low probability to it. And it ought not to guide U.S. policy very much.

Senator MOYNIHAN. I thought we were on the verge of agreeing that you could go back to a very brutal regime, but reverting to a totalitarian regime is increasingly improbable.

Dr. LEGVOLD. But in response to that basic proposition, I think most serious social scientists for a long time have believed that the close approximation of the ideal, the totalitarian state of the 20th century, has long been gone in the Soviet Union. That was true even under Brezhnev.

What we are interested in now, when we look at Gorbachev and the extraordinary change that is taking place, is the evolution through states of authoritarianism; the question of how durable the current form is likely to be; therefore, how durable its consequences will be in Soviet foreign policy behavior.

And in terms of the range of probabilities that we ought to think about, the question is: How likely is it that it could collapse, that it could return to a very considerable level of repression; or that, in

some larger historic sense, we may see a repetition, to use your example, of the collapse of the Austro-Hungarian empire?

Is that the framework in which we should think about perestroika and change in the Soviet Union? As I have said, anything is possible, so a prudent person would include this. But I do not think that is a realistic framework with which to calculate likely outcomes for the evolution of perestroika and changes in Soviet ideas.

Senator MOYNIHAN. Well, then I have one last question, which seems to me to be central to a decision which our Government has to make just now.

And this is not to be invidious about previous administrations or hostile, but try to describe what seems to have been a viewpoint, and to ask whether that viewpoint does not need now to be changed. I speak of the viewpoint that was summed up in the Reagan doctrine. The Reagan doctrine does not have many texts, but it has some. I mean, read the State Department bulletin, their people gave speeches on it.

And the speeches, in essence, stated that in the late 1970's we had entered a new period of Soviet expansion in which the appearance of Marxist-Leninist regimes in quite remote Third World countries represented a leaping over of the containment circle of democratic, Western bourgeois nations. These nations would now be attacked from the rear in some generalized way. This was portrayed as a new phase and a more affecting phase, and therefore, the appearance of these regimes had to be seen as an act of policy directed from Moscow. It had to be countered on the ground by the United States.

An alternate view was that this was just the last appearance of a failed doctrine. That, you know, an idea dies in Paris, but it takes time for the word to get to Saigon. Something that is dead in Madrid for 30 years, finally the word to get to Saigon. And if people once did deeply believe in something in Lisbon and no longer believe, it takes a while for Maputo to get on.

Those are alternate and profoundly important views.

We almost came to the impeachment of a President over the pursuit of policies based on the first view.

I wondered if you had any general comment on that?

Dr. SIMES. Senator, in my view, the Soviet Union under Leonid Brezhnev probably had no grand design. Maybe they were occasionally dreaming about world domination. Brezhnev was an old man and he was dreaming more and more frequently.

But in terms of their practical policy priorities, it is very hard for me to imagine that what they were doing in Angola, Ethiopia, and Central America, was the last leap toward taking over the world.

Having said that, however, I would add that they developed global power projection capability; that they developed a certain contempt for American ability to respond when they would become involved in regions where they had no legitimate economic or security interests.

And I think that if they have discovered that they could pursue operations like that on the cheap, without serious consequences, what started as a fairly low-priority operation could become a new pattern of Soviet behavior.

And I do not know what would happen in Afghanistan, I was in this room back shortly after the invasion, and I tried to make a prediction that Afghans throughout their history fought each other whenever possible and every invader when necessary, and it would be difficult to defeat them provided they could fight with something better than stones.

I do not know what could happen in Afghanistan without the United States, China, and others. I do not know what would happen in Angola and in many other areas.

In short, my feeling is that if you pursue the Reagan doctrine, not as a messianic crusade, not as a universal tool which you would use everywhere no matter what the local circumstances, but if you simply perceive it as a general assumption that you have to upgrade imperial costs to Moscow, I think it was sound and remains sound even today under Gorbachev.

Senator MOYNIHAN. Dr. Ra'anan.

Prof. RA'ANAN. I would suggest that we apply a series of criteria, on the ground, so to speak, to see whether there is a fundamental change in foreign policy. Declarations alone will not do it.

One clearly is the retreat from the so-called Brezhnev doctrine. Will there be continued intervention, in one form or another, in events in Europe, or will, in fact, indigenous movements be permitted to take their own way, wherever it may lead?

That is one sound criterion. It is attached as a litmus test.

The second one is, to what extent would the Soviet Union continue to provide the infrastructure, the logistics of surrogate operations? Will it in fact cease to do so? That is a very important second touchstone.

Tthe third one, and it is there only because it is part of an international agreement, a solemn international agreement, is the human rights questions. And we always seem to feel guilty if we raise it with the Soviet Union.

And we say, "Well, look we are not interfering in your internal affairs." In fact, we are not. The reason why it is permissible to this issue is because it was part of a solemn international contract, Helsinki, and therefore it is a foreign policy question.

Senator MOYNIHAN. You mean it has a quality of law about it?

Prof. RA'ANAN. So, if we applied these three criteria as judgments on the ground, and we see that, in all three, there is in fact a fundamental change, I would be the first one to say, let us immediately draw the conclusions.

Senator MOYNIHAN. Dr. Staar.

Dr. STAAR. Well, sir, I do not want to comment on that grand theory, but on a practical matter. It seems to me that that was a period in which there was some uncertainty as to where the United States stood on these matters.

What we have done now is simply to impose a reasonable price for mischief. If there is a clear shortcoming in our policy, it is that we have tended to do it as soloist rather than in concert with our friends.

Senator MOYNIHAN. Dr. Legvold.

Dr. LEGVOLD. Well, I am not sure that I would agree entirely with the premises of the Reagan doctrine as they were articulated at the time, and as you quite accurately represented them, because

I do not think Soviet policy in the Third World represented a kind of whole, integral, and conscious expansionism—a last gasp of doctrinal commitment, as you put it.

I would more see it as Dimitri Simes has summarized the thrust. I think that pattern of behavior rested on a series of assumptions, assumptions that posed problems for us, not the least because they were assumptions that related to our willingness to respond at some level, and the extent to which detente with the United States could withstand this kind of Soviet behavior. That was the beginning of the mistake on the Soviet Union's part in the mid-1970's.

The point I would make, however, is whatever may be one's perception of the sources of Soviet policy in the 1970's, quite clearly they have changed now in the mid-1980's under Gorbachev.

In effect, they are applying a different cost-benefit analysis to involvement in the outside world, in the Third World.

Senator MOYNIHAN. Which is part of an ideology in a sense if you think that——

Dr. LEGVOLD. I think if there is one area where you can say that a critical, fundamental Soviet assumption is in motion, is being changed, it is that concerning revolution itself, and this has its most practical manifestation in the Third World. I think the Soviets are no longer confident of any kind of uniform development in the Third World amounting to a national liberation struggle, the notion by which they in turn rationalized their own intrusions. Instead, there are all kinds of problems with development within the Third World, and certainly all kinds of costs to superpower intervention, not the least of which, in superpower relations themselves. Those are realities they are now prepared to deal with.

Senator MOYNIHAN. Well, gentlemen, the committee is reassembling, and Senator Pressler was here first, if I may.

Senator PRESSLER. I am going to yield to my good friend, Jesse.

Senator HELMS. Thank you. You are very kind.

Senator PRESSLER. Just a parochial thing, Mr. Chairman, you may not know it, but Bob Legvold is a graduate of the University of South Dakota; he is going to be receiving an honorary doctorate at the University of South Dakota in about 3 weeks, I think, Bob, is it not? We are really proud of you.

Have I got that right?

Dr. LEGVOLD. Thank you, Senator Pressler.

Senator PRESSLER. In fact, when I was a freshman——

Senator MOYNIHAN. Why do you think we invited him?

Senator PRESSLER. That is the very reason. I knew you knew that, so I appreciate it.

Senator MOYNIHAN. He also attended the Fletcher School of Law and Diplomacy, that is really why he was invited.

Senator PRESSLER. But he was an inspiration to me. I was a freshman when he was at the University. We are very proud of all your work over the years.

Let me ask a question. Andrei Sakharov said that perestroika is at a very acute phase and that the West should be genuinely interested in the success of it and show an interest in supporting it.

I would tie that in to some of the things that are happening in the Soviet republics. Armenia, for example; if Armenia were to go so far as to want to be independent, or to have its own government,

what would be the role of United States policy? Where would our policy fall?

Dr. LEGVOLD. Are you asking me that question?

Senator PRESSLER. I ask everybody.

Dr. LEGVOLD. Up to this point, in response to developments in the Baltic, and more recently in the Trans-Caucasus, in Georgia, this administration, and I think this Government in general, has responded very cautiously, and in that respect, from my point of view, correctly.

In terms of Sakharov's point about our stake in perestroika, it is almost certainly true that if the Soviet Union begins to pull apart at the seams, and a nationality crisis could be a path to that, then perestroika is going to be seriously endangered.

Now, to the other extreme, if Academician Sakharov means by that, that the United States ought to make major commitments to perestroika in the economic sphere or become exceedingly active in our diplomacy toward the Soviet Union in ways that attempt to build his political base, then I do not agree with that proposition.

I think that Gorbachev's foreign policy and changes create extraerdinary intrinsic opportunities for us. I think we ought to seize those. But for the rest, we have very little capacity to influence the outcome. I cannot imagine that in the specific instance that you mention that the United States would want, in any fashion, to become involved, let alone to encourage movement in that direction.

Prof. RA'ANAN. If I may, Senator. The Soviet Union, to some extent, has anticipated such developments, because I understand that their security agencies have approached ours on the subject of possible cooperation against terrorism.

Now that happened almost entirely during the Armenian episode. And as you know, there is a fairly serious Armenian terrorist group. And I think the Soviet Union was concerned about some degree of cooperation in dealing with that terrorist group, which would of course involve us, as it were, on the other side.

I would distinguish, and I am not just being legalistic, between different portions of the Soviet Union. Where the Baltic republics are concerned, I believe it is still our policy that we do not recognize their forcible absorption into the Soviet state. This is therefore a very different affair from, let us say, an uprising in the Ukraine, in Armenia, in Georgia, or elsewhere. We do have a policy, we have a diplomatic posture on this issue.

Dr. SIMES. Let me say, Senator, that Andrei Sakharov, in my view, is a great man. He is a great Soviet citizen. As a Soviet citizen, he has a perspective which you would expect from a Soviet citizen, deeply committed to civilized reform in his country.

Such reform should be one of American priorities in dealing with the Soviet Union, but just one.

And, in my view, that what is most important when you think about the Soviet future from the American standpoint is not what they do at home, but how they act abroad. And it seems to me that if you have national turmoil in the Soviet Union, they will have to be more, not less, preoccupied with their matters at home.

I was intrigued by Senator Moynihan's parallel with the Austro-Hungarian empire, and I see many legitimate comparisons, except

one: we live in the nuclear age. And consequently, it seems to me that whoever is going to be in power in the Soviet Union, Gorbachev or Ligachev, they would not contemplate terrible adventures simply because they have terrible troubles at home.

Provided Gorbachev changes his heart or provided he is overthrown, my impression is that the Soviet Union may become a more difficult partner at a variety of forums. I do not think that they will become a more ambitious and successful rival.

And of course their public relations efficiency would go down dramatically. I do not mean to suggest it would be a blessing in disguise, but I think that we should be a little bit analytical and coldblooded in thinking about different Soviet internal scenarios. It is not black and white.

Senator PRESSLER. Just one more question. Is there a realistic chance that in the next 3 to 5 years, if trends in some of those republics continue, that the Soviet Union will break up? Will they demand to be independent countries?

Or is that so farfetched as not to be in the realm of possibility?

Dr. STAAR. It is not farfetched. The discussion on the U.S.S.R. began with the catchword, "decentralization." It then moved to "devolution," then it moved to "federation," and now in many quarters, in both the Baltic and in the Caucasus, they have used the term "decolonization."

Having spent several weeks in both of those areas a few months ago, I am struck by the fact that for the time being, many of the proposals for reform could be accommodated within a federal system, and also within the bounds of the Helsinki agreement, which the Soviet Union is party to.

There is no reason why we should not urge the Soviet authorities to a reasonable accommodation with these more reasonable forces within their country. These forces are not going to go away. There is no reason that we should not remind some officials of the Helsinki principles that bear on the situation.

But it seems to me it would be grossly irresponsible for us to in any way to fan what are extremely dangerous emotions within the U.S.S.R. and Eastern Euorpe. Our concern is that whatever direction the reform movement takes, that it be like a controlled nuclear reaction, not one that runs out of control.

Senator MOYNIHAN. I think the panel is quite clear on that, Senator Pressler.

Thank you very much.

Senator Biden, our ranking member.

Senator BIDEN. Thank you very much.

Dr. Simes, you indicated in your opening statement that we should, I think the phrase you used was be an interested observer of the changes that are going on in the Soviet Union. And I assume there are distinctions that you would make about how interested we should be and how much of an observer we should be.

I thought the answer you gave about us being coldblooded and rational about our own interests as they are affected by what is happening in the Soviet Union was significant.

Could you elaborate a little bit for me on the point of whether or not we should make a distinction between how interested an observer we should be regarding the republics, the satellite countries,

external activities in the Third World, and regarding the more profound questions that have occupied us in the past—such as strategic arms agreements and other militarily related agreements?

Dr. SIMES. Thank you, Senator.

As you may know I was born in the Soviet Union and I certainly feel rather emotionally involved in what is happening there. But I also believe that policy, particularly policies of great powers should be judged by results rather than by intentions.

And I do not see how the United States, with our somewhat limited leverage, with our incomplete information about what is happening in the Soviet Union, and with our many other priorities, can successfully interfere with the Soviet internal process.

You are absolutely right. There are certain cases when we have to express our positions. Well, first of all, if you are talking about those human freedoms which are protected by the Helsinki agreement, even Gorbachev accepts today that they should be on our bilateral, diplomatic agenda.

If you are talking about republics, I completely agree with Uri Ra'anan. If you are talking about the Baltics, there is a longstanding U.S. position that these republics are supposed to be independent.

I would go one step further. I think it is difficult not to identify with the suffering of Armenians, Georgians, Western Ukrainians, and many others.

I agree with Fred Staar, we should not be instigators. We should not be provocateurs. We should not give an impression that we are prepared to support something which can become bigger than life, and then we would abandon it.

But at the same time I think we should make our sympathies clear.

But as far as Soviet domestic process is concerned, it is their process. I think we should express our opinions, but stay away.

Now, if you are talking about arms control, if you are talking about regional issues, of course, we should be an active participant.

Sometimes we are confronted with a question: Well, should we not treat Gorbachev differently from his predecessors? Yes, we should, because he is different. He is making different proposals, proposals unthinkable before 1985. And I think we should meet those proposals on merit.

But we also should not create an impression that we know what would help Mr. Gorbachev, what would hurt Mr. Gorbachev; what would assist perestroika, what would hinder it.

We should look at American interests. We should be openminded about Soviet proposals. We should be prepared to give them benefit of the doubt. But we should not make any kind of concessions which we could not justify to ourselves 5 years later if Soviet policies have changed.

Senator BIDEN. Let me be more specific. I think I completely agree with you. My view is that whatever the reason for Gorbachev's external initiatives or his conventional force reduction initiatives, or his attempts to change relationships, whether ever so sightly or ever so large, with Eastern Europe or Western Europe, or with Third World nations, or with nations he has not attempted to have relationships with before—whatever the reasons—we

should look at Gorbachev's initiatives in terms of how they affect our self-interest.

Now one of the questions I have is about the satellites and the republics. These two entities—the republics and the satellite countries—are often lumped together making no distinction between what our attitudes and our assertions should be with regard to Poland and Armenia, for example. Is there a distinction, in terms of what we, the United States, should be saying and/or doing with regard to the satellites versus the republics?

You have made it clear how you think we should respond or not respond to what is happening in Armenia, to take one particular area. Well, I would like to ask you what happens if similar occurrences take place on a broader scale, which is not unlikely.

Because I do not know any time in history when any authoritarian regime has been able to lift its hand gradually and be able to guarantee and calibrate what the reaction is going to be. I do not know where that has ever happened. I do not know anybody who is that clairvoyant. I do not know how you calibrate people's reactions and feelings with any degree of certainty.

Is there a distinction? If the same thing were happening in Poland today, not through negotiation but through outright marches, where people were being clubbed and killed, should our reaction be any different than it is now, with regard to Georgia or Armenia or any of the other republics?

Dr. SIMES. Senator, in my view it would have to be profoundly different. It would have to be profoundly different because obviously Poland is not inside the Soviet Union, because there are major changes occurring in Poland and because Gorbachev's tolerance of East European autonomous movements is one important criteria of the seriousness of his new thinking.

Let me say as far as I am concerned the administration has major opportunities in Eastern Europe. The Hungarians are coming to us and they are offering an unprecedented arrangement. When it would be finished any American technology transfer to Hungary would be completely guaranteed for verification that this technology would not go to the Soviet Union.

It would be the first case in history when a Warsaw Pact country would make a commitment not to supply something to the Soviet Union, and of course I think we should start talking to the Soviets and making clear what would be the penalties for that crackdown and also what we will not do—what we will not do to their interests in Eastern Europe if they display moderation.

Senator BIDEN. Now let me ask you, Dr. Ra'anan, if we were to make that kind of agreement, which is the next series of questions I wish to relating to Eastern Europe. If we were to make an agreement, explicitly or implicitly, not only about what would happen if they did crack down but also about our refraining from trying to speed up the lifting of the heavy hand of the Soviet Union—would you view that as us selling out on a longstanding 40-year U.S. policy of at least paying great lipservice to the notion of promoting and/or supporting a people who have been occupied?

Prof. RA'ANAN. Senator, I have profound difficulty with the thought of superpowers dividing up the world between them, anywhere—spheres of influence, you name it. I think we are rapidly

moving out of the era where this was a feasible way of dealing with the situation. To go back to a condominium, or an implicit condominium between the two superpowers I think is a mistake in foreign policy.

It first of all cuts out all kinds of other powers who are now major players and interested players—the People's Republic, Germany, Britain, France—and I really do not think this is in our interests. We will create further suspicions and tensions with our own allies because we are taking over what the Greeks used to call "apotropos." That is, the man who is in overall charge of your fortune and your property.

Senator BIDEN. I think our NATO allies would breathe a sigh of relief, from my extended discussions with them. Let me ask you another question.

What is the best way—if you were advising the President—what would you advise him is the best way in the present atmosphere to promote and bring about the most significant amount of freedom that could likely be enjoyed in Eastern Europe? What policy would you propose to the President relative to Eastern Europe to promote greater freedom?

Prof. RA'ANAN. I have to make an abject admission, which is unusual for academicians—we are not known as being a modest group—and that is, the systemic crisis which the Soviet Union is undergoing at the moment is also paralleled by a kind of crisis in Sovietology.

Senator BIDEN. I am sorry—what?

Prof. RA'ANAN. That may seem a strange thing to say, but as a matter of fact before the multiplication of background noises that came as part of glasnost, we had a methodology which worked, more or less, in identifying what was going on.

Suddenly, with this enormous amount of background noise it has become more difficult, not easier, for us to distinguish the players in the game. One of the major problems that we have is really trying to identify who is a "good guy," who is a "bad guy" and what is really being proposed by either of them. One of the problems that I see in this connection is that we cannot really go and say we want a proactive policy to "help" X, whoever X may be.

Senator BIDEN. But do we not have to react? We are at least put in a reactive position, where it is clear that there are certain things that are happening that are profoundly different, and regardless of why they are happening, they are happening and they are unprecedented.

Now, is your suggestion that the United States essentially sit and do or say nothing about those matters as they relate to Eastern Europe, specifically?

Senator MOYNIHAN. Senator Biden, would you mind if I asked you if you would be so kind as to preside and I will run and vote so we can continue?

Senator BIDEN. Not at all, so that way I will be able to keep Senator Simon from asking any questions. If you will answer that last question, I will yield to Senator Simon.

Prof. RA'ANAN. I think there are serious problems with a proactive policy.

Senator BIDEN [presiding]. I am not asking that. A reactive. I am looking for a reactive policy. We have no policy now.

Prof. RA'ANAN. Most of the proposals that have been submitted have to do overwhelmingly with the field of economics and trade. There is a peculiarly myopic view which we have developed that this is the preeminent issue with which we have to be concerned. You have the paradox whereby a supposedly Marxist-Leninist regime in Moscow unconditionally puts politics over economics and quite correctly, I may say, whereas we always are looking purely at the economics and trade side. My problem with most of the proposals that have been made is that they are looking at trade and commerce as being essentially a thing unto itself that can be divorced from broader political action. That is why I am a skeptic.

Senator BIDEN. I understand why you are a skeptic of the policies put forward, but I am asking you what you would propose, not what you are skeptical about. What would you propose?

Prof. RA'ANAN. There is no question but that we can grade our actions vis-a-vis individual countries in Eastern Europe. Obviously, Bulgaria, Czechoslovakia, East Germany to some extent are on a very different plane from Poland and Hungary and to the extent that those differences persist—and they are there, they are noticeable—obviously we have to have very different ways of dealing with these countries, if only to encourage such differences. I believe that as far as those are concerned that are unalterably Stalinist—I think that can be said about Mr. Ceausescu in Romania—we should not treat them the same way as the Hungarians.

Senator BIDEN. Doctor, you would qualify for the Senate. You would make it here. I yield to my colleague, Senator Simon.

Senator SIMON. Just one question and it is really a follow on to what Senator Biden has had to say. Dr. Simes, you said we should deal on our own self-interest and I agree, and Dr. Ra'anan has talked about needing to stand up on human rights.

One of the things in our own self-interest is reaching the right kind of accords on the military side, but it is tied in with human rights, where unquestionably amazing progress has been made. Just yesterday I got the figure, 4,200 were permitted to emigrate this last month from the Soviet Union. That is an astounding thing.

But getting back to the tie in, a few weeks ago I attended a worship service at a Ukrainian Roman Catholic Church in Chicago, all in the Ukrainian language but it was one of those worship services where I did not understand a word that was said but the chorus was magnificent and I have been rarely so inspired by a service.

But as I was sitting there in the midst of these people who speak Ukrainian, whose brothers and sisters and cousins are over in the Soviet Union, I asked myself, would they favor any kind of an arms accord with the Soviet Union and I am sure the answer would be overwhelmingly, "No." I can see I am going to get cut off and you will have to answer this question after the recess and maybe in writing, depending on what the Chair wants.

I think those people are saying to themselves, why cannot my brothers and sisters and cousins worship in the Soviet Union as I am and if that were done, I think, though it is not directly related to arms control it really is related to arms control.

My question is—and if you will hold the answers and maybe put them in writing if we do not get back to this—are there ways that we can encourage greater human rights sensitivities and this kind of thing without internal meddling in line with the Helsinki Accord? How do we encourage this kind of response?

Prof. RA'ANAN. There is a single-word answer, Senator: "Linkage," and even though Henry Kissinger used it I will unashamedly use it as well.

Senator SIMON [presiding]. I am going to have to call a recess right now. After asking the question I am not going to give you chance to answer. I am going to have to go vote.

(A brief recess was taken.]

Senator MOYNIHAN [presiding]. A very good afternoon, to our second panel, which will resume. As the members may know, we are involved in a daylong activity on the floor which will involve votes and such like, and this requires us to maintain this somewhat episodic pattern. Such a thing is not unknown here and we hope you will bear with us.

Dr. Dunlop, we welcome you, sir, Dr. Lubin and Dr. Horowitz. Dr. Lubin is here. Dr. Connor? He is on his way and Dr. Horowitz is most certainly here. That is a good beginning. I am told to move from right to left. I was going to go by the ranking in the panel's listing but I will do as instructed.

Dr. Horowitz, it is a great pleasure and honor for this committee to have you before us. I believe this is the first such occasion and we look forward to your testimony, sir.

Might I just say for the record that in our second panel we will move from the somewhat general observations of the state of the Soviet regime to the specific concerns with regional and ethnic conflict. We have before us persons of great distinction, academic scholars on the subject including, not least, Prof. Walker Connor who has now arrived.

Professor Horowitz, we welcome you, sir.

STATEMENT OF DR. DONALD HOROWITZ, DUKE UNIVERSITY

Dr. HOROWITZ. Thank you, Mr. Chairman. It is a great pleasure to be here. I have a prepared statement.

Senator MOYNIHAN. All statements will be placed in the record as if read and I think it would be best if in a kind of collegial way if each panelist sort of spoke for about 10 minutes and then we will go through and then we will come back and forth as things move along.

Dr. HOROWITZ. Thank you. That was exactly my plan, to make just a few brief remarks at the outset. As you know, I do not specialize in Soviet politics but in the comparative study of ethnic conflict in some fairly divided studies——

Senator MOYNIHAN. A very distinguished study indeed——

Dr. HOROWITZ. So, perhaps the most useful thing that I can do here may be to say a few words about the durability of ethnic identifications in general and make a few remarks about how one might think about Soviet ethnic problems in a broad comparative framework.

On the first point—that is, the question of ethnic identifications—we now know, or we should know, that ethnic identities are not some aberration to be wished away, or in Marxist terminology to wither away. Ethnic identifications in the West and in the East, in developing countries and in industrialized countries, survive because they are useful to people.

They are useful because they provide family-like ties, familiarity and assistance even far from one's actual family, and some assurance of trust and fair dealing and friendship, even in otherwise strange environments.

So, while ethnicity has certainly meant conflict and violence, it also has another side. It has also meant kinship and community, and we have often forgotten this. Instead, we have assumed frequently that social classes are the main actors of politics and that economic gains are the main goals of politics.

There are a good many reasons for this tendency to down play ethnicity as a motive force of political action. They are elaborated in my prepared statement, and I will not reiterate them in any detail here. Let me just tick off a few.

First, we in the West have a general bias against birth-based affiliations. We are a bit embarrassed that we might belong to and have emotional links to groups defined primarily by birth, as ethnic groups are so defined. Modern affiliations are thought to be defined by function or by merit, or by choice, or by just about anything but birth.

This is a bias that goes back to the ending of feudalism and the fixed-birth statuses associated with the feudal estates. Modernity is associated with change rather than with fixity, and fixity is at least part of ethnic affiliations.

Second, the history of Western liberalism is also the history of the elevation of the individual to a position of political preeminence. The formal institutions of the democratic state take the individual as the unit of political action. Elections, for example, aggregate individual preferences.

Bounded social groups, such as the ethnic group, are a bit out of place in liberal democracies, and they can play havoc with democratic institutions. So, as the bias against birth affiliations leads us to down play ethnic affiliations, so the bias toward individualism leads us to down play group action altogether.

Now, Marxism does not have a bias against group action, to say the least. Social classes are collectivities that are assumed to be the main actors of politics. And Marxism does not have a bias against birth affiliations either. Since it assumes away the phenomenon of social mobility, it assumes that people will be born into the social class of their parents and grandparents, and so on. So, it assumes that social classes are actually inherited statuses.

But the materialist side of Marxism sees social classes as such central actors in politics that there is no room for other collectivities, including ethnic groups, and as Walker Connor, among others, has shown, Marxism-Leninism has struggled with the reality of ethnic group political activity which Marxist theory denies in principle.

Now although Marx was wrong about social mobility and he was wrong about ethnicity, still materialism has an important place in

our thinking about social conflict. Even non-Marxist social scientists and political leaders and ordinary citizens often assume that there must be some economic conflict lurking beneath every other conflict. This, too, is a view that underrates ethnicity as a motive force—as an autonomous, independent motive force.

So, for all of these reasons I think we have been very poorly prepared for the worldwide resurgence of ethnic conflict over the last 20 or 25 years or so.

Now, if I may, I would like to say a few things about the second point, Soviet ethnic problems in particular. First of all, the isolation of Soviet studies in the academy from comparative studies more generally has been a real problem in understanding Soviet ethnicity. Students of Soviet ethnic conflict have been scurrying about recently to reinvent wheels that comparativists had already been riding on. It would be very useful for Soviet specialists to build even more on what is already known.

When you place Soviet ethnic problems in a comparative framework you discover some interesting things. Not all Soviet ethnic problems are the same. Not all are likely to take the same course, and some look decidedly more serious than others.

Compare, for example, the Baltic republics to the Central Asian republics, which have been rather quiet of late. The Baltic republics are economically advantaged in the Soviet realm. In comparative perspective, people living in such advantaged regions often have an economic grievance against the center. They suspect that the central government is taking more in revenue than it is returning to the region in goods and services. They also resent the in-migration of ethnic strangers—and the Baltic republics have had a good bit of that, particularly Russians—and they would like to be able to expel or control them.

So, independence on the surface looks pretty attractive to such regions and groups. But before they embark on independence they will make careful calculations about the benefits of staying in the undivided state and they may find, as the Basques and Catalans in Spain have found, that there are some hidden subsidies that make secession less attractive than it seemed at first.

Whether the Estonians or the Lithuanians will make similar calculations I do not pretend to know, but I do know that there is enough comparative knowledge out there to provide a framework to help us answer the question.

The Central Asian situation looks quite different to me, because it involves, in Kazakhstan, for example, indigenous minorities and immigrant majorities, especially in the cities, and an immigrant group—the Russians—that is disproportionately the bearer of the skills of the modern world.

Where such a juxtaposition of groups takes place, it has generally been a prescription for very serious conflict. The Nigerian Civil War, for example, can be explained in terms very similar to these.

Ultimately, the indigenous group tends to make very strong claims to priority in the territory. The violence in Kazakhstan in 1986 and after was in fact very mild compared to what is possible in such situations.

Now, of course, conflict is not inevitable. Regimes can take constructive measures through deliberate policy to reduce the pros-

pects for serious conflict. The Soviet Union has a number of advantages in this respect. Most important is the federal structure, which provides opportunities for ethnic elites at the republic level and also may heighten intraethnic—that is, within-group—struggles for power at the republic level and thereby diminish intereth-nic struggles for power.

I would not therefore like to leave the committee with the notion that the Soviet Union will necessarily blow up or make any other dire predictions of this kind. My message is a quite different one—that one must engage in rather careful analysis of each situation to make even reasonably reliable judgments of this sort.

Such an analysis should draw on knowledge acquired on a world-wide basis and, it should differentiate the various conflicts in the U.S.S.R., although of course one can get demonstration effects from one conflict to another. Comparative analysis should also extend to policies to reduce or contain conflict, and one should never succumb to materialist reductionism that sees all conflict, including ethnic conflict, exclusively in class terms and devalues the authenticity of conflict based on ethnic affiliations.

Thank you very much, Mr. Chairman.

[The prepared statement of Dr. Horowitz follows:]

PREPARED STATEMENT OF DONALD L. HOROWITZ

Mr. Chairman, I am pleased to appear here today. As someone who studies the politics of ethnic relations on a comparative basis and follows developments in the Soviet Union and Eastern Europe in only a general way, I have been struck by the apparent rapidity with which issues in ethnic relations have come to the fore in the Gorbachev period.

For a considerable time, close observers of the Soviet Union had been engaged in a debate on the extent to which Soviet society was vulnerable to the same sharp cleavages that had rent India-Pakistan at the time of independence and partition, Nigeria at the time of the Biafra war, Cyprus, Lebanon, Northern Ireland, Sri Lanka, or even Yugoslavia. There had been some dire predictions that the Soviet Union could not survive in the face of its profound ethnic diversity. These had been counterbalanced by rather more cautious assessments of the extent to which the mechanisms of Communist Party control were adequate to keep ethnic tensions in check, in the same way that other social forces in the U.S.S.R. were kept in check. Now that we have seen party control weakened and ethnic and other social forces unleashed, we are in a better position to attempt an assessment of the prospects for ethnic conflict in the Soviet Union.

I am not a Soviet specialist, although a good bit of my Ph.D. work in the early 1960s at Harvard was in Soviet politics, under the late Merle Fainsod. As I indicated, my work has been heavily concentrated in the politics of ethnic group conflict on a comparative--that is, cross-national--basis. Perhaps the most useful function I can perform for the committee, therefore, is to help place the Soviet

experience in comparative perspective. In that connection, I should like to do three things: (1) set the Soviet experience of ethnic conflict in the context of the worldwide resurgence of ethnic conflict of recent decades; (2) begin to place particular ethnic relationships in the Soviet Union illustratively in a more general framework, so as to facilitate analysis; and (3) make some observations about the possible connections between ethnic phenomena and more general political developments in the U.S.S.R.

I.

To reflect on the importance of ethnicity in the Soviet Union, it is necessary to have a sense of the worldwide resurgence of ethnic sentiment. That resurgence is not confined to any region of the world or to any political system. Although different political systems handle ethnic problems differently, the problems exist in democratic as well as authoritarian systems. In Asia and Africa, democratic states such as India and Sri Lanka have ethnic problems as serious as those that confront authoritarian states. Eastern Europe has long been an area of ethnic tensions and continues to be today--witness the current difficulties in Yugoslavia and Rumania. Western Europe and North America, sometimes thought to have "outgrown" ethnic diversity, have had to cope with a revival of ethnic consciousness in the last two decades.

In accounting for the origins of ethnic sentiment, it is important to recognize its dual character. Ethnicity has meant conflict and violence, but it has also meant kinship and community. The depth of ethnic loyalties suggests that they respond to some rather basic needs. In times of rapid change, ethnic ties can provide a basis for interpersonal

trust and affection when people move from the families that customarily meet these needs. When political systems seem new, alien, or remote, ethnic affinities between leaders and led can provide assurance that the interests of group members are being protected, attaching people to political institutions that might otherwise enjoy only dubious legitimacy.

Our ability to understand ethnic phenomena in the Soviet Union has been impeded by two sets of preconceptions, both of them very largely of the making of Western scholarship. The first is the longstanding isolation of Soviet studies from the mainstream of comparative studies in the various social science disciplines. The second is the general tendency in Western scholarship to regard social classes as more powerful, more natural, and more understandable sources of conflict than ethnic (including racial, national, religious, and linguistic) groups are. The combination of these two self-inflicted handicaps has hindered our ability to fit Soviet developments into a wider framework that might illuminate those developments.

The isolation of Soviet studies was a byproduct of the quest for a paradigm for understanding the Soviet Union, particularly after World War II. Following decades of naive and often euphoric observations about Soviet society, some serious efforts to describe and analyze the Soviet system were undertaken. Since Soviet politics could scarcely be understood in the terms applicable to the Western democracies, new models were devised to accomplish the task. Specialists, trained in the Russian language, steeped in Russian history and culture, and accomplished at interpreting Soviet developments from Kremlinological nuances gleaned

from published sources (since real field research was generally not possible), proceeded to build up a body of knowledge that set them apart from those who studied Western Europe or the United States.

Setting the Soviet Union off as a separate arena was a necessary course, given the unproductive history of attempts to understand the Soviet Union without adequate specialist knowledge, but it meant the absence of any sustained comparative approach to understanding, save for the few studies of comparative communist systems that emerged. When a phenomenon such as ethnic conflict emerges in the U.S.S.R., it is, as I shall soon note, better understood by building on knowledge gained with the same phenomenon elsewhere, but Soviet specialists were unusually poorly equipped to take this path.

The tendency to see conflicts in social class terms--and so to underrate the frequency and importance of ethnicity as a source of conflict--has several different roots, as I shall suggest in a moment. It was such a profound tendency that it led us to forget some central aspects of modern Western history, such as the emergence of nineteenth century nationalism, and to neglect the functions of ethnic group membership. By functions I mean the needs I mentioned earlier that such membership satisfies, including the need for kinlike associations far from home, the need for familiarity and for mutual assistance when other institutions provide such assistance only dubiously or impersonally. Ethnicity is properly considered as being in the same family of affiliations as the family itself; indeed, the ethnic group is a much-extended version of the family. According-

ly, ethnicity is a building block of social organization. Since ethnic groups are defined, and define themselves, by contrast, it is not surprising to find that most countries of the world are ethnically heterogeneous and that many are deeply divided. Why, then, was all of this neglected, forgotten, or unlearned?

The first reason for underrating ethnicity is the deep Western bias against birth affiliations--an ideological bias that goes back to the revolt against feudalism. The social categories of feudal society were ascriptive; that is, social status was given at birth, inherited. Escape from such a status was generally not possible. When Europe emerged from feudalism and broke the chains of the feudal estates, one of the attributes of feudalism it left behind was the immobile, birth-derived character of social identity. The possibility of change, including change in social identity, is a hallmark of modernity. It comes as no surprise, then, that modern society tends to underrate the motive force of any birth-derived affiliation. And ethnic groups are, for the most part, based on affiliation given at birth.

A second source of the systematic failure to give due weight to ethnic affiliations derives more specifically from liberal individualism. Here it is not the ascriptive character of affiliations that is undervalued, but rather the ability of bounded groups to function cohesively in political and social life. Western liberalism, from Hobbes onwards, took the individual to be the component unit of social decision making. The social contract of Hobbes and Locke is an agreement among the individuals who comprise the society. The formal political institutions of liberal democracy are predicated on the same mute assumption of the exis-

tence of individual actors, whose preferences are aggregated to make authoritative decisions. The election, the keystone of Western democracy, is a mechanism by which individual votes are added together to produce a result. And, of course, behind this mechanism lies an explicit conception of the legal equality of each individual citizen. Such individualist assumptions sit only uneasily with the predictable political behavior of bounded social groups, especially ethnic groups, which can easily play havoc with the formal institutions of Western democracy.* The individualist bias of liberalism leads us to neglect behavior based on principles of collective loyalty. Ethnic politics is based very much on collective loyalty.

The principal exception to the individualist bias of Western thought is, of course, associated with the Marxist tradition, which postulates collective political action on a class basis. In fact, because Marxism contains a theory of history that includes feudalism, it is not hostile to all ascriptive affiliations in the way that Western liberalism is. But Marxism sees only social classes as the birth-determined groups that can become the main actors of politics. As is well known, the Marxist tradition has underestimated the importance of individual social mobility and of ascriptive groups apart from social classes. Marx assumed that social classes were closed conflict groups, and he assumed that other bounded conflict groups were less

*In my book, Ethnic Groups in Conflict (University of California Press, 1985), chapter 2, I have given an example of a state in which there are two ethnic groups--a majority and a minority--that are politically cohesive, so that the majority elects a government in perpetuity, confounding the assumption that elections are mechanisms of individual choice that can produce alternation in office. Elections of the sort I have described are actually more common than we like to think.

significant. We know now that he was quite mistaken on both counts. Individual social mobility is not only possible but frequent in a great many societies, and this kills the notion of the social class as an inherited, closed conflict group. Likewise, ethnic groups are indeed composed of people whose affiliations are inherited. Ethnic conflict therefore involves precisely the sorts of closed groups that Marx supposed social classes to be.

Marx was mistaken, but his thinking has colored Western thought about social conflict. To this day, even non-Marxist analysts are often inclined to see conflicts in social-class terms and to see material interests behind every conflict. This is a third source of the tendency to underrate ethnicity as a motive force in politics. The materialist bias leads us to think of all issues as "bread-and-butter issues." It neglects many issues of ethnic politics, which relate to prestige, dignity, group worth, and collective ties to the land, and which cannot be reduced to material issues. When ethnic conflict occurs, materialists tend to see it as an epiphenomenon, a manifestation of deeper economic conflicts that lie beneath the surface. Such a view is, of course, one that systematically undervalues ethnicity and misunderstands ethnic conflict even when it perceives it to be present.

The net result of these tendencies in Western thought and history has been to prepare us poorly for the worldwide surge of ethnic conflict that began at and after decolonization in Asia and Africa (starting with the cataclysmic partition of India in 1947) and has spread to every other continent since that time. Western scholarship long regarded ethnic and racial relations as backwaters of intellectual

endeavor and was slow to adjust conceptions to the rush of events. Western and non-Western policymakers were utterly ill prepared for the struggles that overtook them, and they reacted with variable amalgams of wishful thinking, repression, and palliatives.

After World War II, at just about the time that ethnic conflict was emerging, UNESCO embarked on a series of statements and publications designed to put the imprimatur of science on the effort to abolish "race prejudice." The thrust of these products was to argue that, as innate physical or mental or characterological differences among peoples had no verifiable physical foundation, distinctions based on such differences were necessarily the result of one or another form of irrationality. Quite simply, the solution to ethnic and racial problems was to abolish "prejudice" at the level of the individual person--in short, to repair the mind of the person who had absorbed misinformation and misconceptions.* Behavior based on notions of group difference was to be educated away.

Needless to say, such well-intentioned efforts could scarcely preempt ethnic conflict. For one thing, the minds of individuals are difficult to change one at a time. Focusing on discriminatory behavior has certainly proved easier than dealing with prejudiced thought, at least in some countries. For another, there are sources of ethnic conflict that exist apart from "prejudice" and make it a recurring feature of social life. Moreover, the emphasis on hearts and minds detracts form the inventory of conflict-reducing techniques that aim, not to abolish conflict, but to limit

*I am indebted to Mr. Ivan Hannaford for making available to me a cogent summary of these developments from his work in progress.

and channel it so that its destructive force is muted. For a very long time, scholars did not focus on such methods, and policy makers did not search for them.

For all of these reasons, then, there has been a dearth of conceptions for understanding ethnic conflict in the Soviet Union. Even when students of ethnically divided Western countries, such as Belgium and Canada, or Asian and African countries turned their attention to understanding ethnic conflict, students of the Soviet Union were slower to do the same and slower still to use the comparative literature. There are some exceptions, to be sure, but overall it is accurate to say that only recently, now that it has become exigent, are sustained efforts underway to study ethnicity in the Soviet Union seriously and comparatively.*

II.

It is an old proposition in the sociology of ethnic relations that times of transition frequently provide occasions for serious ethnic conflict. The decline of the Ottoman and Hapsburg empires unleashed waves of ethnic aspirations in Europe and the Middle East. The decline of the Western European empires after World War II did the same in the newly independent states and then had reverberations in Europe and North America. The death of Stalin in 1953 and the promise of Khrushchev's secret speech to the twentieth communist party congress of the Soviet Union in 1956 did the same for ethnic aspirations in Eastern Europe, although these were directed outward, against Soviet domination. Now the Gorbachev reforms have done the same within the Soviet

*I have in mind here Rasma Karklins' book, Ethnic Relations in the USSR (Allen & Unwin, 1986) and several papers by Gail W. Lapidus that attempt to link Soviet to comparative materials.

Union, and there is no reason to assume that ethnic tensions will soon abate.

The themes that have emerged most prominently thus far are familiar to specialists in ethnic relations. For example, in ethnically mixed areas, such as Nagorny-Karabakh in Azerbaijan and Abkhazia in Georgia, there is the desire to be free of alien domination and to control an area of one's own. In economically developed regions, such as the Baltic republics, there is the aspiration to readjust the balance of revenue leaving and returning to the region. These are, as I say, familiar themes, and it would be fruitful to compare particular situations of ethnic conflict in the Soviet Union to situations elsewhere.

Let me illustrate why I think such comparisons are necessary and why I think they will bear fruit for understanding Soviet ethnic problems. Not only will such comparisons help to explain the likely course of conflict, but they also will make clear that the U.S.S.R. possesses several different kinds of ethnic conflict, and it is a mistake to think that all Soviet ethnic problems involve the same grievances, issues, and remedies.

Take the case of Estonia, the republic with the highest per capita income in the U.S.S.R. and with a very substantial Russian minority. Incorporated in the Soviet Union in 1940 in the wake of the Nazi-Soviet pact that also sealed the fates of the other Baltic states and (temporarily) of Poland, Estonia is quintessentially a "captive nation" that might be thought, <u>a priori</u>, to harbor a strong desire for complete independence. I do not pretend to know what Estonians might actually want (in the obvious subjective sense), but I can think of several reasons why, in compara-

tive perspective, Estonians might well settle for something much short of independence.

The argument goes something like this. Ethnic groups that are situated in a region providing an above-average per capita income often have a regional economic grievance: they believe that the center derives more revenue from the region than it returns to the region. Good examples are provided by the Basque country and Catalonia in Spain, both of which paid more in taxes than they received in benefits from the central government. Such regions also receive migrants from other regions who are in search of employment opportunities available in the prosperous region. The influx of strangers creates frictions and apprehensions about demographic balances. Independence would permit the "indigenous" inhabitants to kill two birds with a single stone--to retain the revenues and control (or expel) the ethnic strangers. It is an attractive prospect. Closer examination of the situation of such regions, however, often reveals--at least where regional prosperity is based on manufacturing--a variety of hidden subsidies that make cost-benefit ratios more ambiguous than they seemed. Among the most prominent of these subsidies is protection of the nationwide domestic market from foreign competition in manufactured goods. In such a case, the advanced region may be benefiting from tariff protection for its goods that might not be competitive on world markets. That has certainly been true of the Basque country, and it is one very important reason why the Basques appear so overwhelmingly determined to settle for autonomy rather than independence.

Another consideration that frequently informs the calculations of ethnic groups with above-average levels of education is their common propensity to migrate out of their

home area in search of employment opportunities. This is more true of advanced groups from economically backward regions (the Ibo are the quintessential example) than it is of advanced groups from economically advanced regions, since backward regions often cannot provide ready sustenance for all their inhabitants. But it may also be true of advanced groups in advanced regions, who are in search of more and better outlets for their talents. Where this happens, the presence of large numbers of group members outside the home region is a powerful deterrent to secession and independence.

I am not suggesting that the calculations of the Estonians or of any other ethnic group will parallel any of these calculations exactly. Since Estonian prosperity is based in large part on the extraction of minerals that could conceivably fetch a higher price on world markets, the parallels may be inexact indeed. But I do want to suggest that the calculations of regionally concentrated ethnic groups in the Soviet Union about how far they wish to proceed toward separatism and what they will likely settle for need to be put in some such comparative framework that relates group antipathies and aspirations to group and regional interests, broadly conceived.* A positional analysis will, in other words, be necessary. From what little I know of the position of the Estonians, I suspect that there may be some significant inhibitions on separatist impulses, once serious calculations are made.

*Such a framework is presented and elaborated in my article, "Patterns of Ethnic Separatism," Comparative Studies in Society and History, vol. 23, no. 2 (April 1981), pp. 65-95.

The situation of the Central Asian ethnic groups strikes me as quite different and potentially of far greater consequence for ethnic relations in the Soviet Union as a whole. Frequently, there are Russian majorities--and quite segregated and advantaged majorities at that--in Central Asian cities. In Kazakhstan, the Kazakhs are actually a minority in the entire republic, with only 36 percent of the population in the 1979 census. The Kazakhs are an agricultural people, and before the Bolshevik Revolution their loyalties were at a very local level. As is the case with many Asian and African ethnic groups, their group consciousness at the encompassing, all-Kazakh level is a relatively recent phenomenon. As is also true elsewhere, the in-migration of large numbers of ethnic strangers sharpened intergroup contrasts and strengthened the amalgamated ethnic identity. The result is that Russians and Kazakhs confront each other as ethnic strangers, that the Russians are the bearers of the skills associated with the modern world, and that a juxtaposition of "backward" but indigenous Kazakhs with "advanced" but immigrant Russians is surely present. Where such juxtapositions emerge, so-called backward-indigenous groups typically make strong claims to priority in the territory. Such claims are often reinforced by intergroup violence, and secessionist movements are common. The violence of 1986 and after in Kazakhstan was mild, compared to what is possible in such situations.

Here, again, group calculations of costs and benefits may make the situation more murky than it may seem, but backward groups in backward regions (such as Central Asia) typically have fewer inhibitions on separatism and more incentives to secede than do advanced groups in advanced regions (such as the Baltic states). After all, local

elites in a truncated secessionist state will not have to face competition from better-educated immigrants--an important point in leadership attitudes toward separatism. If an Islamic regime takes power in Afghanistan and succeeds in communicating its message across the northern border, this will not make things easier for the Soviet authorities. And variants of the Kazakh juxtapositions are present in the other, generally less well-off Central Asian republics as well.

Again, a word of caution is in order. The eruption of conflict is not inevitable. By accident or by design, regimes may take measures that mitigate severe ethnic conflict. Anything like reliable forecasting will require a very careful assessment of the impact of ethnic policy as well as of raw group feelings. Some students of Soviet politics have suggested that there are subtle forces binding Central Asian and other non-Russian republics (especially the Ukraine) to the Soviet Union. All I want to underscore here is that the Central Asian group juxtapositions share many elements in common with severe intergroup conflicts elsewhere in the world and that the Central Asian situation differs structurally from the Estonian situation and requires separate analysis. In all of this, a comparative framework helps to sort out likes from unlikes, both within and between countries.

III.

One of the principal methods for mitigating ethnic conflict entails the division and redivision of territory. Federalism and regional autonomy are devices that can channel conflicts in an intraethnic or interethnic direction, reducing the importance of some lines of cleavage and

heightening others. The Soviet Union is, of course, a federal state, and its relatively successful containment of ethnic conflict until fairly recently may be attributable, in part, to the federal structure, with republics organized largely along ethnic lines. Elsewhere, ethnically homogeneous states in a federation have often heightened intra-ethnic tensions, as subgroups struggle to control the state. This has certainly been the case in those states of the Indian union that are ethno-linguistically homogeneous. In heterogeneous states, such as Assam, on the other hand, the struggle to control the state has proceeded largely along ethnic lines, and the conflict has been severe. The basic organization of the Soviet federation has taken place in response to ethnic considerations, and the division and redivision of territory remains a device that can be employed for purposes of ethnic policy.

The organization of the Communist Party is another such instrument, but here the issues are more complex. Political power is a frequent objective of ethnic groups. In the U.S.S.R., power has, until now, been a function of control of the party, and Russians and other Slavs have been overwhelmingly dominant in the central party apparatus and disproportionately powerful in the republics as well. If groups like the Central Asians become mobilized along ethnic lines, there is little doubt that the party will be one of the first objects of their aspirations. It is worth recalling that the precipitating event of the 1986 violence in Kazakhstan was the replacement of a Kazakh party first secretary by a Russian. As a gross comparative generalization, it is true that decentralization is a better guarantor against separatism in ethnically divided societies than is

tight central control, once groups on the periphery become politically active. But it is also true that the central authorities usually believe the opposite to be the case. When decentralization of control takes place, typically in response to a grave crisis in ethnic relations, often involving civil warfare, it is then generally too late to have the intended effect. The Soviets may have some very difficult choices ahead with respect to genuine ethnic power-sharing within the party. Countries that faced ethnic problems earlier, rather than later, have usually had better results, and I doubt that the Soviet Union will be an exception to this rule.

It is not possible to consider prospects for conflict or accommodation without mentioning the ethnic impact of policies adopted for non-ethnic purposes. Consider, for example, economic restructuring. In the past, the Soviets have experimented with various territorially-based economic units, the arrangement of which can have an impact on ethnic-group relations. In the late 1950s, for example, Khrushchev attempted to decentralize economic control through the creation of some 105 sovnarkhozy or regional economic councils. The boundaries of some of these were coterminous with republic boundaries, but most republics were divided into at least several council areas. This is the sort of reform that, if left in place for a considerable period (as the sovnarkhozy were not), might have a profound effect on ethnic conflict. For if units like these function essentially as new states or substates in a federation, they are likely to shift the focus of struggles for control downward, with an accompanying shift in conflict alignments. In this connection, it is worthwhile comparing the pre-Biafra,

conflict-prone, four-unit federation of Nigeria to the post-Biafra, much more complex, 19- and now 21-unit federation of Nigeria. This is not the place for the kind of careful dissection of the impact of various reform structures that will need ultimately to be performed, but it is assuredly the place to underscore that any reform that alters the loci or balances of power may have significant implications for ethnic relations in the Soviet Union. Since the Gorbachev period is a time of reform, it is not too soon to search for likely ethnic consequences.

IV.

Given what I said in the first section of this statement about impediments to understanding ethnic conflict, it would be presumptuous, if not flatly contradictory, to conclude by making a series of assertions about the course of the phenomenon in the U.S.S.R. This much, however, seems assured:

1. Ethnic affiliations are a durable source of conflict in the modern world. Cleavages and conflict alignments may change, but the need for the family-like ties and functions that ethnicity provides means that ethnicity will not "wither away." However, ethnic conflict is a variable rather than a constant; it becomes now more, now less severe, depending on a variety of conditions, some of which are and some of which are not amenable to policy manipulation.

2. The Soviet Union is by no means exempt from the forces that are conducive to ethnic conflict. Class struggle has not replaced ethnic or national struggle and is not likely to do so. On the contrary, ethnicity possesses some

of the powerful conflict-producing characteristics that Marx erroneously attributed to social class.

3. The Soviet Union is not necessarily headed for the most severe and sustained ethnic conflict. In some regions, there may be the makings of such conflicts, but it will require close analysis of intergroup stereotypes and interests, as well as of the impact of policy, to have a firmer sense of likely outcomes.

4. The Soviet Union contains several distinct types of ethnic conflict, rather than a single type. Examination of these can be facilitated by comparative analysis extending beyond the boundaries of the U.S.S.R.

5. There are more and less effective policies to increase or decrease ethnic conflict. Again, comparative inquiry is useful. Among the policies that affect ethnic conflict are those that have non-ethnic purposes, including, for example, administrative decentralization, economic restructuring, and a measure of electoral democracy. Since the Soviet Union is currently in a period of important policy change, there are substantial possibilities for policy change to have unintended effects on ethnic group relations within the U.S.S.R.

Senator MOYNIHAN. Dr. Horowitz, I just have to say that last week when Ambassador Kennan appeared before us it was almost majestic as he got around to the question of Marxism. He said, "Oh, yes, Marxism. Well, that was an effort to deal with the social tragedies that arose from the class differences that appeared in the early stages of the Industrial Revolution. It was the sort of thing—well, interesting, but rather antique. That was a long time ago in another place."

Professor Connor, we welcome you to the committee, sir.

STATEMENT OF DR. WALKER CONNOR, THE JOHN R. REITEMEYER PROFESSOR OF POLITICAL SCIENCE, TRINITY COLLEGE, HARTFORD, CT

Dr. CONNOR. As Professor Ra'anan mentioned earlier this morning the Soviet leadership has now scheduled for early this summer a plenum of the party's Central Committee that is going to be

charged with establishing concrete proposals for dealing, in this new era of glasnost and perestroika, with what they term their national question.

Now there have been only a very few hints as to the direction that these proposals are apt to take. However, I think there are indications, very definite indications, that a new-found concern with the cultural and political rights of the minorities within the various republics are going to be used as an important reason for restricting the rights that the titular groups within those republics are currently demanding.

In general, however, I think the few hints that we have concerning future policies by Moscow have often been contradictory, the contradictions unquestionably occasioned in large part by the crush of events as nationalist organizations have sprung up in a series of republics, the more extreme demanding total independence, but even the more moderate demanding a level of autonomy which, if granted, would leave the U.S.S.R. more resemblant of a Swiss-type confederation than the highly centralized system that it has been.

Those charged with the preliminary planning for the plenum have therefore been assigned the unenviable task of developing formula for accommodating: one, glasnost; two, the national aspirations and passions it has unreigned; and three, the retention of effective centralized authority.

The contradictions between the last of these elements, concentrated power, and the first two can of course be glossed over, but not neutralized, by resort to dialectical slogans such as that advanced by the plenum of the Central Committee held in January of this year; namely "a strong center and strong republics."

The designers of a new program for dealing with the national question will also, it seems to me, be hampered by their historical and ideological inheritance. By the former, I refer to the past policies of the Soviet Government toward their non-Russian peoples since the October revolution. The programs of the newly formed popular fronts make clear that the non-Russian nationalists have not forgotten any of these policies. By the ideological inheritance, I refer to Lenin's legacy on the national question or what the Soviets term "Leninist nationality policy."

All leaders from Stalin to Gorbachev have proclaimed their fidelity to this inheritance. The problem for the Soviet leadership—regardless of whether the leadership believes in the advisability of this policy or not—is that while Lenin condoned a period in which the various national cultures would be permitted to flourish, he also made clear that the ultimate goal was a merger, a fusion of peoples into a single identity.

Now, in fact Gorbachev in a very recent speech went to some pains to describe himself as one who had stoutly resisted placing words like "fusion" and "merger," and so forth of peoples into the new party program. But at the same time he obviously hedged and was not prepared to actually say that he was now repudiating this ultimate Leninist goal.

It goes without saying that such a merger of peoples is not a prospect that engenders affection among non-Russians, and because I therefore believe that the past policies and the ideological legacy

retain great significance, I have attempted to trace them in my prepared remarks.

I thank you, Senator.

[The prepared statement of Dr. Connor follows:]

PREPARED STATEMENT OF WALKER CONNOR

The Leninist Legacy

Article 70 of the Soviet Constitution defines the USSR as "an integral federal multinational state." While some ninety percent of all contemporary countries are also multinational, there are few states so ethnically complex. The 1979 Soviet census listed more than one-hundred national groups. Although some of these groups are numerically quite small, consisting of a few thousand members, several are impressively large. Twenty-two of the national groups now number more than 1,000,000 people. From a comparative perspective, this means that there are twenty-two peoples in the USSR, each of whom outnumber the total population of nearly forty (approximately 25 percent) of today's independent countries. Moreover, the Ukrainian community, the largest national minority in the Soviet Union (surpassed only by the Great Russians), exceeds 44 million in membership. Only twenty independent countries (less than 15 percent of the total) can claim so large a number of people. There are more Ukrainians living within the Soviet Union than there are people living within such important countries as Argentina, Canada, Poland, the Republic of South Africa, Spain, or Yugoslavia. Furthermore, the next largest national group, the Uzbeks, number 13 million, a figure nearly twice the number of Swedes within Sweden and more than three times the number of Norwegians within Norway, Jews within Israel, or Irish within Ireland.

It is the official Soviet contention that Lenin bequeathed to them *the* formula for managing and ultimately eradicating this heterogeneity. Thus, the 1986 Program of the CPSU asserts:

> The Party has resolved and will continue to resolve [all issues involving the relations among the country's national groups] on the basis of the tested principles of Lenin's nationalities policy.

Seven decades after the October Revolution, the Soviet authorities thus insist that they remain steadfast in their commitment to "Lenin's nationalities policy." A charge of violating that policy remains tantamount to a charge of apostasy.[1] Yet despite such proclamations of undeviating fidelity, Soviet policy has clearly undergone marked shifts over the last seventy years, sometimes seeming to favor a pluralistic approach (most conspicuously the post-revolutionary period of "idigenization" [*korenizatsiya*], while other times tacking in the direction of acculturation and assimilation (most glaringly from 1934 to 1953). Cloaking such different approaches under the single rubric of Leninist nationality policy has been possible because of the dialectical approach to nations and nationalism that Lenin espoused and also because of the paucity of policy guidelines bequeathed by Lenin.

Lenin's dialectical formula for taming nationalism in a postrevolutionary situation was a reflection of his perception of nationalism as the outgrowth of past discrimination. He was well aware of the strong nationalist sentiments pervading the Armenian, Lithuanian, Ukrainian and other minority peoples, but he felt that this was due to their historic second-class treatment within czarist Russia, an empire to which he referred as "the prison of nations." Lenin was convinced that this legacy of hostility and distrust must be expurgated by a period of the strictest national equality. And thus the dialectic: permitting, indeed encouraging for a time the national language and other overt characteristics of the various national groups would lead the groups toward fusion. In 1930, Stalin would acknowledge that to the unen-

---

[1] For example, propaganda tirades exchanged between the Soviet Union and China during the late 1960s and 70s were liberally spiced with charges and countercharges that the other party was violating Lenin's legacy on the national question. Thus a 1972 article by a Soviet author charged that even though, in matters of minorities policy, "the Soviet experience of the formation and development of the USSR was literally before China's eyes . . . China did not proceed along a Leninist path." (A. Voropayev, "According to the Formulas of the Emperors, Great-Han Chauvinism in Action," *FBIS*, March 31, 1972.) An editorial in the *Peking Review* (17 [July 19, 1974], pp. 18-19) retorted: "Brezhnev and his ilk shamelessly try their utmost to describe what they call 'national rapprochement' as 'the Leninist policy on nationalities' and the continued development along the road chartered by Lenin. . . . It has nothing in common with the Leninist policy on nationalities; it is an utter betrayal of Leninism." The campaign of mutual vilification continued into the 1980s. One 1981 Soviet work, for example, charged that "the leaders of China long ago retreated from the Marxist-Leninist solution of the nationalities question." M. Ya. Susnanlo *et al*, *Against Maoist Falsifications of the History of Kirghizia* (Frunze, Kirghizistan: n.p., 1981), p. 136.

lightened it might appear "self-contradictory" that "we who are in favor of the fusion of national cultures in the future into one common culture (both in form and content), with a single, common language, are at the same time in favor of the blossoming of national culture at the present time," but he added, "Whoever has failed to understand this dialectical character of historical processes is lost to Marxism."[2]

Lenin felt that the greatest care must be taken to ensure that the non-Russian communities did not perceive sovietization as a continuation of Great Russian chauvinism in a new guise. Encouraging the national language and other cultural characteristics of the various peoples would make clear that a new era in the relations among nations had been entered. And as suspicions and distrust dissipated, nationalism would correspondingly diminish and a natural coming together, a rapprochement of the nations, would proceed until a final merger or fusion took place.

Lenin was far more interested in the message than the medium. He construed language and traditional forms of music, dance, drama, etc. as simply the conduits of the messages that would be shaped by the communist party. Concerned lest national distrust and animosity lessen the receptivity of the masses to the party's messages, Lenin reasoned that the party's directives would not be resisted as the orders of an alien (Russian) regime if they came dressed in the local tongue and other appropriate national attire. National accoutrement was thus to be pressed into the service of sovietization. In 1928, Stalin would christen this entire approach "national in form, socialist in content."[3]

Lenin therefore bequeathed the broad outline of a plan for achieving assimilation via the seemingly divergent path of encouraging aspects of national uniqueness (what came to be known in the Soviet lexicon as "the flourishing of nations"). However, beyond insisting that coercion be avoided as counterproductive, Lenin did not provide his heirs with any policy guidelines. He did make clear that pluralism, although to be encouraged for a time, had no intrinsic value beyond serving as a transitional step leading to a higher stage at which national differences would have withered away. Thus said Lenin:

> The proletariat supports everything which contributes to the elimination of national differences [and it] welcomes any and every assimilation of nationalities --with the exception of those carried out by force or on the basis of privilege.[4]

Lenin therefore condoned policies to promote assimilation, while proffering only a single guideline, namely, avoid coercion.

Lenin's anticipated timetable for the dialectical process of flourishing and rapprochement to complete itself was equally non-specific. His inspiration was the Communist Manifesto's dictum that under capitalism "national differences and antagonisms are daily more and more vanishing" and that the victory of socialism "will cause them to vanish still faster." He therefore saw the process as historically determined and inevitable, and so the exact moment at which the process culminated was of no greater concern to him than it had been to Marx and Engels. Following the October Revolution, he had made a passing reference to the likelihood that "national and state differences ... will continue to exist for a very, very long time even after the dictatorship of the proletariat had been established on a world scale."[5] But these words were penned during the euphoric days when the world-wide revolution was believed at hand. His "very, very long time" might therefore be construed as a half-century or several centuries.

---

[2] Joseph Stalin, *Deviations on the National Question*, June 27, 1930.

[3] The slogan became commonplace following Stalin's *Remarks to the Peoples of the East* (1925: "Proletarian culture does not cancel national culture, but lends it content. National culture, on the other hand, does not cancel proletarian culture, but lends it form." Stalin's terminology was apparently inspired by the Communist Manifesto: "Though not in substance, yet in form, the struggle . . . is at first a national struggle."

[4] Cited in Alfred Low, *Lenin on the Question of Nationality* (New York: Bookman Associates, 1950), pp. 115-116 and Bertram Wolfe, *Three Who Made a Revolution*, rev. ed. (New York: Dell Publishing Co., 1965), p. 589.

[5] Lenin, *Left-Wing Communism, an Infantile Disorder* (1920).

The important point is that Lenin's dialectical schema, unaccompanied as it was by specific policy recommendations and a timetable for its completion, although described as a formula for solving the national question, proved to be no formula at all. Those who have been in favor of vastly accelerating the assimilation process, those who favor the indefinite perpetuation of national flourishing, and those holding one of the myriad positions between these two extremes have all been able to quote Leninist scripture. As noted, Soviet policy, despite declared obeisance to Leninist national policy, has been been marked by considerable vacillations on the continuum between pluralism and assimilation.

The cornerstone of Lenin's national policy was therefore a period of vigorous national equality as a means of overcoming the suspicions of the past and setting the stage for the natural coming together of peoples. "All nations are equal" has been a much publicized slogan from the time of the Revolution to the present. Thus, the preamble of the Soviet Constitution speaks of "the equality in law and in fact of all nations and ethnic groups" and, the 1986 Program of the CPSU (Part One) describes the USSR as a society in which "national inequality has been eliminated and the actual and legal equality and friendship and fraternity of all nations and ethnic groups have been asserted."

The policy of national equality has three dimensions: (1) economic equality, (2) cultural equality, by which is meant the right of each nation to preserve its particular culture, most notably its language, and (3) political equality. As evidence that political equality is practiced, the Soviets can point to commonplace constitutional and statutory prohibitions against discrimination on the basis of national ancestry or race. But a far more unique manifestation of ostensible national equality is reflected in the political subdivision of the Soviet Union. Some fifty peoples of the Soviet Union have an administrative unit named after them. Fourteen non-Russian peoples enjoy the highest administrative unit -- a Soviet Socialist Republic -- a unit constitutionally declared to be sovereign and to possess the right to secede from the Union. Stretched out below these SSRs in a descending order of officially ascribed importance is a series of twenty Autonomous Soviet Socialist Republics, eight Autonomous Regions (*Oblasti*), and ten Autonomous Areas (*Okruga*). The propaganda value of this structure is enormous, for, as noted, ninety percent of all countries today are multinational. And multinational states the world over have been increasingly experiencing ethnically inspired unrest, as discontented minorities demand either greater autonomy or actual independence.[6] A perception of a country as a cluster of ethnically delineated, autonomous or sovereign units is therefore one with great appeal to national minorities everywhere.

Non-Theoretic Dimensions of Policy

There is a wide discrepancy between official declarations concerning the attainment of national equality within the Soviet Union and the degree to which economic, cultural, and political equality have in fact been achieved, or even pursued.[7]

Economic Equality:

Not surprisingly, economic equality among nations has never been approximated. Considering that the Soviet Union covers one-sixth of the globe's land area, and varies intensely from region to region with regard to climate, soils, topography, ease of access, and natural resources, it could hardly be otherwise. As noted elsewhere:

> The geographic distribution of ethnonational groups into distinctive homelands is sufficient in itself to assure the

---

[6] Among the many works documenting this global development are Donald Horowitz, *Ethnic Groups in Conflict* (Berkeley: University of California Press, 1985); Harold Isaacs, *The Idols of the Tribe* (New York: Harper and Row, 1975); and Anthony Smith, *The Ethnic Revival* (Cambridge: Cambridge University Press, 1981). For pertinent works by the present author, see Walker Connor, "Self-Determination: The New Phase," *World Politics*, 20 (October 1967), pp. 30-53; "Nation-Building or Nation-Destroying?", *World Politics*, 24 (April 1972), pp. 319-355; "The Politics of Ethnonationalism," *Journal of International Affairs*, 27 (No. 1, 1973), pp. 1-21; and "A Nation is a Nation, Is a State, Is an Ethnic Group, Is a ...," *Ethnic and Racial Studies*, 1 (October 1978), pp. 377-400.

[7] For a more detailed treatment of this discrepancy, see Walker Connor, *The National Question in Marxist-Leninist Theory and Strategy* (Princeton: Princeton University Press, 1984), Chapter 9.

existence of economic discrepancies among groups. There is what might be termed a "law" of uneven, regional economic development. Though the unevenness is apparent when we contrast huge areas such as continents, most, if not all states also reflect economic differentials between regions. This is true of ethnically homogeneous and heterogeneous states alike: Germany, as well as France, illustrates notable sectional differences. Among the contributing factors are regional variations in such categories as (1) topography (ease of transportation), (2) climate, (3) soils, (4) availability of natural resources and raw materials, (5) population density, (6) the current technological capabilities of the local populace, (7) distance from potential markets, (8) the comparative advantage of local industry with regard to (a) age of plant and equipment and (b) margin of profit, and (9) the enduring effect of earlier decisions regarding investments and the locating of support industries and facilities (the infrastructure).[8]

The aggregate impact of such factors in the case of the Soviet Union is enormous. It would be unrealistic to have expected those responsible for planning to approve the expenditure of untold sums of scarce investment capital in an attempt to bring Tadzhikistan or Turkmenistan up to the level of a Latvia. That we are not faced here with a simple matter of favoring the Great Russians is illustrated by the fact that the inhabitants of the Armenian, Estonian, Georgian, Latvian, and Lithuanian SSRs enjoy a higher per capita income than do the inhabitants of the Russian Soviet Federated Socialist Republic. Faced with limited resources and the need to consider the security interests and the economic well-being and growth of the country as a whole, economic planners have adopted the standard of comparative return. The highest priority in allocating investments and in locating industries has been strategic considerations; and the second has been economic rationalization, in terms of the presence of raw materials, support industries, markets, infrastructure, and the like.[9] While perfectly understandable and rational, these yardsticks have nothing to do with national equality.

This is not to deny that living standards have improved substantially in the Asian sector of the country during the nearly seventy years of Soviet rule. The point, however, is that discrepancies between regions remain massive and can be expected to widen. In 1970, for example, the per capita product of the wealthiest SSR was more than two and one-third times that of the poorest.[10] Moreover, upon reaching the stage of "developed socialism," which was heralded by the 1977 Constitution, the heretofore ostensible goal of achieving economic equality among regions was scrapped. What had been practice now became public policy as well: "the need to ensure the utmost efficiency of the whole economy" became the public standard for "distributing the productive forces and investments."[11]

Cultural Equality:

The most central issue of culture policy has been the status of the non-Russian languages. In the years immediately following the Revolution, the thrust was definitely in the direction of encouraging the various national languages. Peoples who had never had a written language were provided one. Non-Russian language schools flourished and were made available even to non-Russian communities living outside of their homelands. But all of this began

---

[8] Walker Connor, "Eco- or Ethno-Nationalism?," *Ethnic and Racial Studies*, 7 (July 1984), pp. 342-359.

[9] See Robert Lewis, Richard Rowland, and Ralph Clem, *Nationality and Population Change in Russia and the USSR* (New York: Praeger, 1976), pp. 116 *et seq.*

[10] By contrast, the 1970 discrepancy in the case of the poorest and wealthiest states of the United States was 1.9 times. (Data on the Soviet Union derived from Table A.15 in Zev Katz (ed.), *Handbook of Major Soviet Nationalities* [New York: Free Press, 1975], p. 452; and on the United States from U.S. Bureau of the Census, *Statistical Abstract of the United States 1986*, 106th ed. [Washington, D.C.: U.S. Government Printing Office, 1985]. For a survey of six analyses, each of which documents sharp regional economic disparities within the Soviet Union, see Ralph Clem, "The Ethnic Dimension of the Soviet Union" in Jerry Pankhurst and Michael Sacks (eds.), *Contemporary Soviet Society* (New York: Praeger, 1980).

[11] M. Khalsukhaaedov, "Soviet Society: Complete Equity of Nations," *International Affairs* (Moscow), March 1978, p. 29.

to change during the 1930s. Only Russian language schools were permitted to operate everywhere. Non-Russian language schools were largely restricted to the appropriate ethnically delineated administrative unit. In 1938, the study of Russian was made compulsory in all schools. In 1958-58, the introduction of the "voluntary principle," which permitted parents living within their eponymous administrative unit to send their children to Russian language schools, additionally undermined the non-Russian schools.[12] Furthermore, most non-Russian peoples have witnessed a progressive lessening in the number of years of education offered in their own language. For example, for peoples possessing an autonomous republic or region, the number of possible years of education in their language was, on the average, halved between 1958 and 1972, from the already quite low figure of 5.2 years to 2.7 years.[13]

Those fourteen peoples with a Union Republic have fared much better. They can at the present time conceivably complete both primary and secondary education in their own language. However, it has become increasingly evident that union republic status does not offer permanent immunity to pressure to attend Russian language schools. The authorities have been applying what might be termed "the nine-to-five rule," for the Baltic peoples (Estonians, Latvians, and Lithuanians) and two of the Transcaucasian peoples (the Armenians and Georgians) have thus far been treated preferentially in matters touching on language choice. For example, while the number of indigenous language schools in the republics of these five peoples is still sufficient to meet the demand of those who desire to attend them, elsewhere the number is inadequate. This shortage of indigenous language schools is also reflected in the comparative number of primary and secondary school texts available in the languages of the titular peoples. Among the nine less favored peoples, the proportion of texts per native speaker of the local language is only 35 percent the corresponding number for those in a republic declaring Russian as their primary language. In sum, data suggest that in nine of the union republics an increasing number of titular people will not find a local language school nearby.

The prevalence of Russian as the language of instruction increases as one progresses from lower to higher education. At the university level, it approaches a near monopoly within some republics. At this level, the number of Russian-language textbooks per individual who claims Russian as his/her primary tongue is more than ten times the corresponding figure for those who claim the indigenous language as their primary tongue. And this disproportion would be far greater if limited to the nine less favored union peoples. Moreover, the competitive examinations for entrance to institutes of higher learning are customarily given in Russian, thereby providing a distinct incentive for indigenes to send their children to the Russian language schools at the primary and secondary levels. Russian has become the language of success within a majority of the union republics.

Pressures upon the five more favored titular peoples have not been absent. The pre-1978 constitutions of Armenia and Georgia (as well as Azerbaijan) had each declared the respective indigenous language to be the official state language of the republic. But new constitutions, which were drafted in 1978 to reflect the attainment of "developed socialism," replaced the formerly preeminent status of the local language by a phrase holding out only "the possibility of using the native language." The implications of this change did not go unheeded. Unanticipated protest demonstrations in the Georgian capital induced the authorities to order a most unusual retreat. The old phraseology was reinserted into all three constitutions, but the long-term intent of the authorities to upgrade Russian relative to the local languages had been made clear.

---

[12] For a discussion of the non-voluntary aspects of this "voluntary principle," see Connor, *The National Question*, pp. 256-257, 261, and 480.

[13] This trend was approvingly noted in a Soviet editorial as early as 1963:
"The use of the Russian language as the medium of instruction is at the present time a growing tendency in the development of the national schools of our country. In the Russian SFSR the process of the voluntary changeover of national schools to the Russian language of instruction from a certain class upwards in accordance with the desire of the parents is even now proceeding very actively in most Autonomous Republics, Autonomous Regions and National Areas. At present in the schools of thirty-six nationalities of the Russian SFSR instruction is conducted in Russian from the V, IV, III, II, or I class upwards."
(Cited in Ivan Dzyuba, *Internationalism or Russification?* (New York: Pathfinder Press, 1968), p. 178.)

Political Equality:

The discrepancy between reality and the theory of political equality, symbolized in the system of ostensibly sovereign and autonomous administrative units, is also substantial. Given the highly centralized administrative system of the USSR and the hierarchical communist party, this could hardly be otherwise. But through their cadre policy and their internal migration policies, the authorities have further undermined whatever theoretic latitude the units purportedly possessed for self-rule.

Cadre Policy: As a blueprint for nurturing Marxism within a single, integrated multinational structure, Leninist national policy would seemingly mandate that the visible central organs of authority reflect the ethnonational complexity of the entire population, while the more localized visible power-structures reflect the unique national coloration of the immediately surrounding populace. In particular, one would expect that the visible elite within an ethnically delimited autonomous unit would be manned by members of the titular group. To do otherwise would risk undermining the very *raison d'etre* of such administrative units, namely, to convince each national group that it has its own, truly autonomous political organization.

Despite periodic shifts in the degree to which cadres have been drawn from the local populace, however, the Soviet leadership has remained opposed to the nationalization of cadres per se. Under what is termed "the exchange of cadres" (but what has been an essentially one-way supply of key personnel from Moscow), the center has resolutely maintained its representatives in all republics. Thus, the 1961 Party Program of the CPSU announced that "the growing scale of communist construction calls for the continuous exchange of trained personnel among nations." And the policy has been reaffirmed in the 1986 Program: "it is essential ... to develope the interrepublican exchange of worker and specialist cadres."[14]

The cutting edge of such a cadre policy has been somewhat blunted by the practice of assigning members of the local national group to positions of great visibility and little power. For example, since the demise of Stalin the Soviets have followed the practice of appointing a member of the local national group to the most prestigious office in each union republic, namely, the party's first secretaryship. However, the second secretary, *in whom is placed primary responsibility for monitoring cadre policy on the local scene*, is regularly a non-indigene (usually Russian), whose primary loyalty to the center is further insured by limiting the duration of his assignment in the locale.

The primacy of the state's dominant ethnic element is most apparent in the agencies responsible for internal security. In all Marxist-Leninist states the dominant group is customarily disproportionately represented in the upper echelons of the military; combined with the practice of assigning minority personnel serving in the military outside of their homelands, this procedure minimizes any danger of the homeland serving as a focus for a secessionist movement. In the case of the Soviet Union, one study indicated that all of the commanders-in-chief of the country's military districts were Russian.[15] And another study found that 98 percent of all military members of the Supreme Soviet were of Slavic, principally Russian, background.[16] Similar considerations help determine the national composition of the secret police. The head of the KGB for each of the union republics is customarily a Russian.[17]

---

[14] The close association that the authorities perceive between cadre exchange and overall national policy was suggested in an article in *Pravda*, July 16, 1971, which reminded readers that the "interrepublic exchange of cadres" remained a key element in the "coming together" of the Soviet nations.

[15] Teresa Rakowska-Harmstone, "The Study of Ethnic Politics in the USSR," Paper prepared for the national symposium, "The National Problem in the USSR and Eastern Europe under Brezhnev and Kosygin," University of Detroit, October 3-4, 1975.

[16] Ellen Jones, "Minorities in the Soviet Armed Forces," *Comparative Strategy*, 3 (No.4, 1982), pp. 306-307. The author adds: "A similar pattern emerges from a name analysis of 73 key MOD (Ministry of Defense) officials."

[17] Dina Spechler, "Russia and the Russians," in Zev Katz (ed.), *Handbook of Major Soviet Nationalities*, p. 11.

In recent years, the trend has been to increase the number of local cadre in showcase positions. But real power remains concentrated in non-indigenous hands, and those cadre who have been drawn from the local national group have been periodically warned of the hazards of activities that could be construed as a manifestation of "local nationalism," "bourgeois nationalism" or "national deviation" by the numerous cases of prominent local leaders who have been purged on such charges.

Ethnic Dilution Policy: While the guiding principle for granting autonomy to compact national groups should be "one people, one autonomous unit," gerrymandering and population redistribution have produced a very different situation. Even as originally drawn, the borders of the autonomous units within the Soviet Union did not approximate ethnic distributions. In nine of twenty-seven union and autonomous republics whose name in each case implied the predominance of a single national group, the titular group did not in fact even account for a majority of the population. In no case did the proportion of the titular people reach 90 percent, and the median proportion it represented was less than two-thirds.[18] The theory of Leninist national policy to the contrary, most peoples, including those purportedly assigned their own unit, thus found themselves sharing an autonomous unit with large numbers of aliens.

Almost equally injurious to the principle of one nation, one autonomous unit were the large numbers of people left outside of the unit bearing their designation. In three of the twenty-seven previously mentioned cases, *a majority of the group's members remained outside*. In half of the cases, less than 80 percent of the membership resided within the confines of the unit bearing their national name.

Subsequent redistribution of population within the Soviet Union has further undermined the principle of ethnonational autonomy. Particularly pronounced has been the impact of migrations by the state's dominant group. Since 1917, there has been a dramatic influx of Russians into all non-traditionally Russian homelands. As of 1979, Russians accounted for more than 7 percent of the population of each of the union republics other than Armenia. The range was from 2.3 percent in the case of Armenia to 40.8 percent in the case of Kazakhstan, with a mean of 16.7 percent and a median of 12.3 percent.

The penetration by Russians has been even more dramatic with regard to the autonomous republics within the Russian Soviet Federated Socialist Republic. In 1979, the percent of Russians within these sixteen republics ranged from 11.6 percent to 72.0 percent, with a mean of 44.7 percent and a median of 43.3 percent. In six of the sixteen autonomous republics, the Russians constituted an absolute majority, and, in four others, they were the largest single ethnic group.

The overall impact of gerrymandering and population redistribution upon the ethnic homogeneity of the republics has therefore been enormous. With regard to the fourteen non-Russian union republics, the titular group typically accounts today for less than two-thirds of the republic's population. In no case does it account for 90 percent of the entire population, and in two cases it fails to account for a majority. Again, even more striking is the case of the autonomous republics within the RSFSR. *In only four of the sixteen cases does a single non-Russian people account for a majority of the population*.

This ethnic dilution of the republics has, of course, lessened their potential for becoming the foci of ethnically inspired demands for greater independence. Recent demographic developments have therefore been a matter of growing concern to the authorities. While Russian migration out of the RSFSR has continued, the percentage of the population represented by Russians has been shrinking within a majority of the union republics.

There are two principal factors that account for this seeming anomaly. The major factor involves differential fertility rates. Although fertility rates among the non-European peoples dropped during the 1970s, those rates remained far in excess of the rates for the Russian and other European peoples. (Only in the six westernmost union republics did the percentage of Russians increase during the decade.) In a figurative sense, the authorities have been running out of Russians. The second factor has been a growing

---

[18] In addition, there were three autonomous republics whose ethnic heterogeneity was at least suggested by their official designations, each of which contained the names of two ethnic groups. The title of yet another autonomous republic made no mention of any ethnonational group: its highly heterogeneous population was grouped under the name of the region, Dagestan.

tendency for members of non-Russian ethnic groups either to remain stationary within their republic or, in the case of those outside it, to emigrate to it. In the two decades between 1959 and 1979, the percentage of the nation living outside of its union republic decreased for ten of the fourteen titular peoples and remained essentially static for two others.

In addition to increasing the risk of the union republics becoming foci for nationalist sentiment, the growing ethnic concentration in these units is troubling to the authorities because it is antithetical to the process of the merging of nations. A series of Soviet studies have unanimously concurred that residence within one's homeland-republic exerts a most dampening influence upon acculturation and assimilation.[19] As the individual with primary responsibility for approving these studies concluded: "On the whole, peoples living within their own Union or Autonomous Republics as a rule steadfastly preserve their mother tongue and their sense of national identity."[20]

Given, then, these recent trends (plus the desire to transfer labor from the worker-surplus Asian republics to the worker-short eastern RSFSR), the authorities have unsurprisingly demonstrated avid interest in inducing emigration by non-Russian indigenes. In effect, such emigres do double duty: their departure automatically raises the percentage of non-indigenes within their native republic and their arrival lowers the homogeneity of their newly adopted union republic. Encouraging such a migratory pattern has been particularly pronounced since the Twenty-Sixth Party Congress in 1981.[21]

Retrospect and Prospect

To place recent events in perspective, it is necessary to trace the major vacillations in Soviet national policy. As earlier noted, the 1920s and early 1930s were a period of official encouragement for national flourishing on the part of the non-Russian peoples. However, a major aspect of Stalin's purges in the 1930s was the rooting out of all manifestations of nationalism. Charges of "nationalist deviation," "bourgeois nationalism," "separatism," and "anti-state activity" became common. Cadres were "denationalized;" histories were rewritten to extol the virtues of the Great Russians and the debt owed to them by the non-Russian peoples; the use of the Russian language was promoted in all social endeavors; attempts were made to bring scripts, grammars, and vocabularies of non-Russian languages into the greatest possible harmony with Russian; the citizenry was regularly warned against nationalist deviations; and officials spoke increasingly of the new supranational Soviet man who had evolved. In short, the trend became lopsidedly in favor of assimilation.[22]

Following Stalin's death, Lavrenti Beria attempted to enlist the resentment engendered by these policies in his drive for power. Under his influence, the CPSU's Central Committee resolved in 1953 "to end the mutilation of Soviet nationality policy," and purges and self-criticism for "abuses of Leninist nationality policy" took place within the upper reaches of the republican wings of the Party. Nikita Khrushchev, in turn, successfully used this very policy change to undermine Beria within the Politburo, by stressing, in his words, that it would "aggravate nationalist tensions between Russians and non-Russians, as well as between the central leadership in Moscow and the local leadership in the Republics."[23] However, the fact that the party was publicly committed to rectifying Stalin's extreme assimilationist stance precluded too rapid a return to pro-assimilationist measures, and the first years of the Khrushchev era were marked by a gradual increase in the number of indigenous cadres within the republics, making membership in the titular nation a criterion for certain positions (most dramatically the first secretaryship of the republican wing of the party), and a lessening of public pressure to adopt the Russian language. A hint of Khrushchev's true inclinations with regard to the national question was offered in his famous 1956

---

[19] For a convenient summary of several of these studies, see Brian Silver, "Inventory of Propositions Drawn from Soviet Empirical Studies on the Attitudes of Soviet Nationalities." Paper prepared for the AAASS Nationalities Project Workshop, Banff, Canada, September 1974.

[20] Yulian Bromley, *Soviet Ethnography: Main Trends* (Moscow: USSR Academy of Sciences, 1976), p. 119.

[21] See Connor, *The National Question*, pp. 316 *et seq.*

[22] *Ibid.*, p. 397.

[23] Nikita Khrushchev, *Khrushchev Remembers* (Boston: Little Brown, 1970), p. 330.)

denunciation of Stalin and Stalinism at the Party's Twentieth Congress. Although he acidly criticized Stalin for the World War II forcible dispersion of a number of national groups outside of their traditional homelands and although he had the Congress go on record as unambiguously committed to national flourishing, Khrushchev also emphasized that "We must affirm that the Party had fought a serious fight against Trotskyites, rightists and bourgeois nationalists."[24] The remaining years of Khrushchev's tenure reflected a determination to accelerate the merging process. In 1957, the role of the republics in economic planing and management was downgraded. In 1958, the "voluntary" principle with regard to attending either national or Russian language schools was instituted. During 1959, a spate of non-Russian leaders were purged for "nationalist deviations." The Party Program of 1961 noted that "the boundaries between the Union Republics of the U.S.S.R. are increasingly losing their former significance," and it prophesied that "the nations will draw closer together until complete unity is achieved." Consonant with this prediction, strong pressures were placed upon non-Russian writers to publish in Russian, as part of a program to hasten acculturation and assimilation.[25]

Khrushchev's eclipse signalled a move away from this rapid assimilation model. The republics were reinvested with their previous economic prerogatives and talk of the "complete unity" of nations was shelved in favor of a more equitable balance of drawing together and flourishing. The shift was noticeable in the contrasting tones of Khrushchev's 1961 speech to the Party's Twenty-Third Congress and Brezhnev's 1966 speech to the Twenty-Fourth Congress. Khrushchev had said:

> We come across people, of course, who deplore the gradual obliteration of national distinctions. We reply to them: Communists will not conserve and perpetuate national distinctions.

In a far more conciliatory vein, Brezhnev stated:

> In solving any problem, whether it be of political, economic, or cultural development of our country, the Party will show solicitude for the interests and national differences of each people.[26]

Brezhnev's early years were also characterized by a more empirical approach to the national question. In 1966-1967 a leading Soviet journal printed a series of scholarly articles reflecting a broad spectrum of opinion on the national question. Authors included some who were in favor of much more rapid assimilation and those in favor of intense foot dragging in that direction. Moreover, a decision was made to permit and to publish at least some of the findings of a series of sociological studies documenting intergroup attitudes. In 1969 a Scientific Council on National Problems was created. And in 1972, official acknowledgment that there were indeed problems traceable to the country's ethnic heterogeneity came from the highest source. Heretofore the official position had been that the national question had been solved. The 1961 Party Program, for example, had unequivocally stated that "the Party has solved one of the most complex of problems, which has plagued mankind for ages and remains acute in the world of capitalism today -- the problem of relations among nations." But in his 1972 speech to commemorate the fiftieth anniversary of the founding of the Soviet Union, Brezhnev, after bowing in the direction of past party pronouncements by noting that "we have every reason to say that the nationalities question, in the form in which it came down to us from the past, has been resolved completely, resolved definitively and irrevocably," went on to suggest that the question was in fact far from being resolved "completely," "definitively," and "irrevocably."

> As I have already said, we have completely resolved the nationalities question in those aspects that we inherited from the prerevolutionary past. But nationality relations even in a society of mature socialism are a reality that is constantly developing and putting forth new problems and tasks. The Party constantly keeps these questions in its field of vision and resolves them in good time in the interests of the whole country

---

[24] For the entire speech, see Henry Christman (ed.), *Communism in Action: A Documentary History* (New York: Bantam Books, 1969), pp. 158-228.

[25] For some remarkable candor concerning this campaign of the early 1960s by both victims and perpetrators, see the *New York Times*, January 29, 1967.

[26] Both citations can be found in Connor, *The National Question*, p. 400.

and of each individual republic, in the interests of communist construction.

> It should not be forgotten that nationalistic prejudices and exaggerated or distorted manifestations of national feelings are extremely tenacious phenomena that are deeply imbedded in the psychology of people with insufficient political maturity. These prejudices continue to exist even in conditions in which objective preconditions for any antagonism in relations between nations have long since ceased to exist.[27]

This public admission that national antagonisms were still prevalent after a half-century of the Soviet experiment represented a striking *volte-face* from the prior "the national question has been solved" position and was evidently undertaken because the disadvantages of continued denial of a set of serious problems were considered greater than the perils of admission. The successful search for remedies required acknowledgment of the disease. The admission of national antagonisms gave *ex post facto* official endorsement to those empirical studies already underway and legitimized at a stroke all future research in a field that was taboo to scholarship so long as officialdom maintained that the national question had been solved.

Acknowledging the existence of a serious problem also justified a speeding-up of the assimilation process. In the same 1972 speech, after quoting Lenin, the General Secretary called for a marshaling of forces to this end:

> Lenin spoke out very clearly on this score: "The proletariat cannot support any reinforcement of nationalism -- on the contrary, it supports everything that helps to obliterate national distinctions and to remove national barriers, everything that makes the ties between nationalities closer and closer" (*Complete Collected Works*, Vol. XXIV, p. 133).
>
> In resolving questions of the country's further development along the path outlined by Lenin, the Party attaches great importance to the continuous systematic and thorough cultivation of a spirit of internationalism and Soviet patriotism in all citizens of the Soviet Union. For us, these two concepts constitute an inseparable whole. Needless to say, they are being cultivated in the working people by Soviet life itself, by all our reality. But conscious efforts by the Party and all workers on the political and ideological front are also necessary here. Our work in this area is a highly important part of the general cause of the construction of communism.

Consonant with this injunction, the remainder of Brezhnev's rule was marked by a policy of more rapid acculturation and assimilation. A recharged militancy against national deviations became apparent. The number of trials for nationalist proclivities rose, and several non-Russians were removed from high level posts in their home republics. Editorials, articles, and a new law on industrial associations made evident that the powers of the republics were once more to be curtailed.

The new (1977) Constitution reflected this same *Zeitgeist*. Whereas the 1961 Party Program had committed the Party to actively promote assimilation, the Constitution now formally committed the state to the same cause: "The state helps enhance the social homogeneity of society, namely ... the all-round development and drawing together of all the nations and nationalities of the USSR." The Constitution also failed to empower the union republics to maintain their own armed forces, a right technically (but never substantively) enjoyed under the 1936 Constitution; and in his report on the new Constitution to the Supreme Soviet, Brezhnev acknowledged that further restrictions on the republics, and even the total eradication of the republics, had been considered but rejected on the ground that such reforms were premature. Further, "the *right* [to] instruction in schools being conducted in the native language" contained in the 1936 Constitution was reduced "to the possibility to attend a school where teaching is in the native language."[28]

---

[27] *The Current Digest of the Soviet Press*, 24 (no.5), p. 6.

[28] As earlier noted, this same wording was soon to be injected into the constitutions of the three Transcaucasian union republics in an abortive attempt to deprive the local languages of their official status.

In the years between adoption of the new Constitution and Brezhnev's death in 1982, the emphasis upon the fusing of peoples accelerated. An all-union meeting in Tashkent in 1979 endorsed a series of proposals to intensify the teaching of Russian beginning with nursery schools. The Twenty-Sixth Party Congress in 1981 called for still greater efforts to spread the adoption of the Russian language. Moreover, even more rapid strides toward assimilation were in prospect: A piece in *Pravda* on April 9, 1982 proclaimed that "the processes of the consistent rapprochement and all-around cooperation among all Soviet peoples ... are intensified in the mature socialist society" that had been ushered in by the 1977 Constitution. And a piece written by the editor-in-chief of *Kommunist*, practically on the eve of Brezhnev's death, warned that Lenin's dictum that "the goal of socialism is not only ... the convergence of nations, but also their merging ... does not permit any misinterpretations."[29]

The short tenures of Yuri Andropov (16 months) and Konstantin Chernenko (13 months) indicated no deviation from the commitment to accelerated fusion. Perhaps to underline that this commitment was now so universally and uncompromisingly accepted by the Party hierarchy that crown-changing would no longer be accompanied by policy vacillations and retreats (as had occurred following the demise of Stalin and the ouster of Khrushchev), Chernenko, only a few weeks after Brezhnev's death, reasserted the party's commitment to the fusion of nations and hinted strongly at the coming eradication of the republics.

> At the present historical stage and in the future the USSR represents the optimum state form for the cohesion of Soviet nations and ethnic groups in order to attain our program goals. At the same time, we do not regard the established national state structures as something fixed and immutable.[30]

And, upon taking power, Andropov also expressed his dedication to the fusion of nations:

> Comrades, in summing up what has been accomplished, we naturally, give most of our attention to what still remains to be done. Our end goal is clear. It, to quote Lenin, "is not only to bring the nations closer together but to fuse them." The party is well aware that the road to this goal is a long one. On no account must there be either any forestalling of events or any holding back of processes that have already matured.[31]

This paper does not attempt to trace the numerous twists and turns of Gorbachev's policies toward the national question. At this writing, nationalist movements in, *inter alia*, Armenia, Azerbaijan, Belorussia, Estonia, Georgia, Latvia, Lithuania, Moldavia, and Ukraine have the Soviet leadership desperately seeking formulae for accommodating glastnost, the national aspirations it has unleashed, and effective centralized control. The contradictions between the first two and the last of these elements can be glossed over but not neutralized by resort to dialectical slogans such as the current "a strong center and strong republics." A Central Committee plenum, scheduled for this summer, has the unenviable task of translating this slogan into specific policies. There has been no hint concerning any of the specifics and one suspects that the avalanche of events has outpaced those charged with the preliminary planning. Perhaps the only certain prophecy is that whatever direction this policy assumes will be described as faithful compliance with Lenin's legacy on the national question.

---

[29] Richard Ivanovich Kosolapov, "Class and National Relations at the Stage of Mature Socialism," *JPRS* 82853, February 11, 1983.

[30] Konstantin Chernenko, "60 Years of the Peoples' Fraternal Friendship," *Problemy Mira I Sotsializma* (December 1982), pp. 13-14.

[31] Yuri Andropov, "Sixty Years of the USSR," *FBIS* (December 21, 1982).

Senator MOYNIHAN. Which you have done very well. I would like to get back, when we have a discussion, to that Leninist proposition. Was that a kind of a melting-pot notion which would get rid of some anxieties, or was it a Marxist notion that this would happen automatically in consequence of the economic relation to production that will now ensue? We will get back to that. Dr. Lubin, we welcome you from far-off Kazakhstan.

STATEMENT OF DR. NANCY LUBIN, CARNEGIE-MELLON UNIVERSITY, PITTSBURGH, PA

Dr. LUBIN. It was Uzbekistan, but it is a pleasure to be home. I should clarify at the beginning I am currently the Sovietologist at the Congressional Office of Technology Assessment, but I am speaking today on the basis of work I conducted as an academic, first at Oxford and now at Carnegie-Mellon University. The testimony is primarily based on a 1-year's residence in Uzbekistan—not Kazakhstan—and repeated visits over the last 11 years to all four of the Soviet Central Asian republics.

As you know, a currently common view of the Soviet Central Asian nationalities is that they comprise a group of Muslims united in their adherence to Islam and in their opposition to an atheist Soviet rule. A common expectation, therefore, is that should the barriers to greater self-expression and autonomy be removed, as many believe is happening now under perestroika, the Soviet Muslims would undoubtedly unite in their opposition to Moscow and in the name of Islam.

If this is true it would have enormous implications for Moscow. I should note that all of the nationalist demonstrations that we have seen so far have come from ethnic and nationality groups that each represent only about 1 or 2 percent of the total population.

The Muslim groups today comprise about 50 million people, or about 17 percent, of the Soviet population and with rates of population growth roughly three to four times those of the Russians——

Senator MOYNIHAN. How many?

Dr. LUBIN. Rates of population growth three to four times that of the Russians, some demographers predict that there may be as many Muslims as Russians in the middle of the next century.

But the notion that all of these peoples are in fact united under Islam is not so straightforward.

I would like to summarize my written statement by making just a few points, first, about the extent of ethnic and nationality identity before Gorbachev, the effects of perestroika, and then the key challenges that I believe may face Moscow in the near future that go beyond questions of Islam alone.

First, ethnic identity in Soviet Central Asia has proved to be not only tenacious in the face of adversity, but also multifaceted. Before the October revolution Islam formed the basis of life in Central Asia, whose people were more akin to the neighboring Persians and Turks to the south than they were to the Russians up north.

But in the 1920's the Soviet Government, wary of a potential pan-Islamic sentiment, divided these Muslims into numerous nationalities with their own specified territories and during the 70

years of Soviet rule, large numbers of Russians and Slavs have come into the region bringing Soviet policies, culture, industries, and attitudes with them.

The result has been that today distinctions between Asian and European, religious and secular, ancient and modern, are no longer as clear as they were just a few decades ago. Today, local citizens can be Uzbeks, Tajiks, or any one of the local Muslim nationalities in the U.S.S.R. without necessarily being Muslim believers.

Those who call themselves believers may mean quite different things from one to another and may not necessarily be ideologically opposed to Moscow. And despite the fact that they share a common Islamic heritage, Central Asians, individual nationality groups, or even Muslims, may be sharply divided among themselves on issues of faith as well as on secular issues.

One of the first "racial riots" that I encountered in my year at Tashkent University was between Uzbeks from two different parts of Uzbekistan who were fighting against each other. Amidst all of the rockthrowing and all of the namecalling, no Russians were involved.

Today, longstanding tensions between Tajiks and Uzbeks, and among others of the local nationality groups, often come to the fore. To a large extent, ethnic and national identity is contextual, with different identities rising in different circumstances.

The second point, then, is that in the years before Gorbachev I think this contextual nature of different identities comprised the crux of Moscow's policy toward Central Asia: to ensure that no issue would arise that could possibly unite all Central Asians, or Muslims, or any one of the individual nationality groups, against Moscow.

In every area where it seemed that Muslims might have common interests opposed to Moscow, the Brezhnev leadership tried to keep open a number of safety valves. It simultaneously encouraged and discouraged religion, local language use and other kinds of "cultural holdovers" from the past.

It encouraged a kind of affirmative action program to provide more opportunities for the locals. And at a time when the Central Asian economy was performing poorly, Moscow allowed a good deal of private enterprise, if not economic crime, to flourish.

Together, these factors comprise what I called an "uneasy compromise" in Central Asia, muffling any expressions of political discontent. It seemed that this "uneasy compromise" could be effective in circumscribing discontent as long as Moscow neither cracked down on the private economy without making sure that the socialized economy could fill that gap, or cracked down on religious or cultural freedoms that had been permitted to the Central Asians.

Well, the Gorbachev leadership initially did both of those things, so that ironically, my third point would be that perestroika is in some ways viewed as a crackdown in Central Asia as much as a liberalization.

In a drive to raise efficiency and cut down on abuse, the first 2 years under Gorbachev's leadership saw a strong campaign to eradicate political and economic corruption and cut down on private activity throughout Central Asia and at all levels of society.

In Uzbekistan alone, 80 percent of the Central Committee members and 90 percent of the candidate members were dismissed and many were replaced by Russians. The practice of affirmative action was also curtailed as the new Gorbachev leadership adopted a nationality blind approach to personnel assignments and economic planning.

Perhaps most important were the unintended economic effects of the reforms themselves. The Gorbachev reforms expanded the amount of private activity allowed under Soviet law. But a greater emphasis on law enforcement also meant that tougher measures were introduced for activity that was not expressly permitted.

Certainly in the northern parts of the Soviet Union, where private economic activity has generally been pretty limited, these measures would be perceived as an economic liberalization. But in a region such as Central Asia, where unofficial private activity was already such an important part of the economy, the requirements that this be registered and monitored, and that taxes be paid, ironically made the reforms look like they were constricting economic activity rather than expanding it.

In the religious and cultural arena, the new Gorbachev leadership initially also cracked down much harder than its predecessors. On his first visit to Tashkent as the new General Secretary, for example, Gorbachev issued one of the fiercest attacks on Islam uttered for some time.

In his speech on November 24, 1986, he called for an uncompromising struggle against religious manifestation and he said that party leaders in particular who participate in religious ceremonies should be made to "answer for their behavior." He initiated strong crackdowns on party members, as many were kicked out.

The net effect of all of these policies, I repeat, was that instead of democratizing many people believe that they are clamping down. Recently——

Senator MOYNIHAN. Dr. Lubin, did you say 80 percent of the party?

Dr. LUBIN. Yes—80 percent of the Central Committee members were removed. Some of these harsh policies may recently have been relaxed, but they have also led to greater ethnic or national consciousness on the part of the local populations and sometimes in areas that one would not have expected. Compounded by greater openness in public discussions, we have seen a heightening of this consciousness but it has cut many different ways. Informal groups and small demonstrations, while not on the same scale as in some of the other republics, have been calling for increased local language use, greater cultural freedom, more authority over their own economic decisionmaking.

More recently, they have also been raising new and perhaps more serious challenges, imbuing issues such as health, environment, balanced economic growth, lack of water, and similar issues with a strong nationalist cast.

For example, in Uzbekistan and Turkmenistan, the traditional focus on cotton has now become one of the biggest issues, with people labeling that as exploitation from Moscow, something that sapped resources that could have been used to support the local

population and something that caused the environmental devastation of their republics.

Large scale use of dangerous pesticides recently led the Soviet Minister of Health for the Turkmen S.S.R. to describe the Amu Darya—which is one of the two main rivers that is virtually Central Asia's only water supply—as "little more than a sewage ditch."

The Central Asian population is also becoming increasingly vocal about the health effects of these catastrophes. While infant mortality rates have declined in most of the other Soviet republics between 1970 and 1986, they rose in Soviet Central Asia by as much as 49 percent in Uzbekistan.

Today, Central Asia's infant mortality rates are among the highest in the world, even in developing countries. At the same time, official Soviet efforts to limit family size or introduce family planning have in some quarters led to quiet cries of genocide.

It is these kinds of issues that may now present the greatest challenges to Moscow, rather than questions of Islam, per se. A group of primarily Uzbek writers who have banded together in the Committee to Save the Aral Sea were recently castigated by Uzbekistan's First Secretary for "slanderous attacks and bellowing directed against the leadership." There are many examples of groups being directly criticized for "nationalist" activities.

Not all of these issues pit Central Asians against Moscow. Questions of family planning and health have become the subject of intensely heated debate, not just with Moscow but among Central Asians themselves. But as the experience of Nagorno-Karabakh, or the recent Georgian demonstrations, show, interethnic disputes, or disputes within or between particular ethnic groups, can rapidly become directed against Moscow.

For my last point, I would just end by saying I was told by an Uzbek poet last year that "if a peaceful dog is hit long enough with a stick, eventually it will bite." The Central Asians could descend on Moscow like a pack, and they might not. If they do, it is unclear whether they will do so over issues of Islam or in pursuit of other interests of more immediate concern. It is also unclear whether they will do so under the banner of being Muslims, Central Asians, or in the name of any one of their individual ethnic groups. And it is also unclear whether they will get into a dogfight even among themselves.

The main implication I would suggest that this might mean to us is that we do not just focus on the Islamic dimension, to the extent that it may blind us to many of the other serious issues that might ultimately be the key to more serious challenges, Central Asians may pose to the Soviet Empire in the future.

[The prepared statement of Dr. Lubin follows:]

PREPARED STATEMENT OF NANCY LUBIN

It is a pleasure to appear before the Foreign Relations Committee today to talk about ethnicity and nationalism in Soviet Central Asia. I am currently the Sovietologist at the Congressional Office of Technology Assessment. I am speaking today, however, with regard to work I have conducted as an academic, first at Oxford University and then as an Adjunct Professor at Georgetown University. This testimony is based largely on one year's residence in Uzbekistan and repeated visits over the last eleven years to all of the Soviet Central Asian republics.

As you know, a common view of Soviet Central Asian nationalities currently is that they comprise a homogeneous group of Muslims united in their adherence to Islam and in their opposition to an atheist, Soviet rule. A common expectation, therefore, is that should the barriers to greater self expression and autonomy be removed -- as many believe is happenning under perestroika -- the Soviet Muslims would undoubtedly unite in their opposition to Moscow in the name of Islam.

It goes without saying that the nationalities with a Muslim heritage in the USSR are assuming increasing importance largely because of their rapid demographic growth. I should note that all of the nationalist demonstrations and uprisings so far have come from ethnic and national groups that each represent only 1-2% of the total Soviet population. According to the 1979 census, the Georgians alone comprise roughly 1.4 percent of the Soviet population. The three Baltic nationalities -- Estonians, Latvians and Lithuanians -- together comprised little over 2 percent.

The Muslim nationalities, by contrast, today comprise about 50 million people, or roughly 17% of the Soviet population. With high rates of population growth -- roughly four times that of the Russians -- that means that within the next decade or so, the Soviet Muslim nationalities will account for the entire increment to the Soviet labor force, about one third of the Soviet draft age population, and because they have more children, these trends will only intensify. Some demographers predict that there may be as many Muslims as Russians by the mid 21st century.

The vast majority of Soviet Muslims, moreover, are concentrated in the four Central Asian republics of Uzbekistan, Tajikistan, Turkmenistan, and

Kirgizia. The population of the Soviet Central Asians is expected to increase to almost 50 million by year 2000 -- almost double what it was only a decade ago -- or to roughly 16% of the projected total Soviet population. According to Soviet reports, Uzbekistan alone presently accounts for 1/5 of the growth in the country's labor resources, and "in the near future, the republic will be contributing 30% of the growth in the country's labor resources." Because of high population growth rates and low mobility among the Central Asian nationalities, moreover, these figures mean that a growing proportion of all Soviet citizens will be concentrated in this southern tier of the country.

Thus, should Soviet Muslims band together to press for certain interests, the implications could be great. But important questions remain. Are these populations united in their adherence to Islam and in their opposition to Moscow? Has perestroika in fact meant greater autonomy, or "democratization" for the Central Asian republics? What might be the nature of potential future national assertiveness, should it arise in Central Asia? To better understand these questions, I would like to briefly address three issues:

1) the role of ethnicity and national identity in Soviet Central Asia before perestroika;
2) the effects of perestoika on national identity; and
3) the kinds of challenges Central Asians may likely pose for Moscow in the near future.

Role of Ethnic and National Identity before *Perestroika*

Before the Soviet Revolution, Islam formed the basis of life in Central Asia, whose people were more akin to the neighboring Persians and Turks to the south than to the Russians to the north. Life was organized around the tribe or clan, and the traditional occupations centered on sedentary pursuits of the oasis -- agriculture, commerce, artisan trades -- or nomadic pastoralism. Even the Russian domination of the late nineteenth century did little to substantially alter local village life. The total Russian population living in Central Asia at the turn of the century was small, comprising only about 2 per cent of the Central Asian population; and the lives of the Russians and

Asians rarely overlapped. National identity was unkonwn among the indigenous populations, as loyalties rarely extended beyond the family, tribe or clan.

After the Revolution, however, the Bolshevik government strove not only to rule the area, but thoroughly to transform the region and its people. It faced an almost entirely rural and Muslim population which had a 1 percent literacy rate; a Persian (in the case of the Tadzhiks) or Turkic (in the case of most of the other major Central Asian peoples) language completely unrelated to Russian; and strong economic, social and political traditions and institutions totally alien to the Russian heritage. In the face of these obstacles, the revolutionaries set out to eradicate religion, educate the population, make Russian the lingua franca, introduce modern industry, and supplant local traditions with Soviet methods and mores.

In order to do this, original policies showed the need for compromise between the Party's aim for absolute unity and centralisation, and its recognition that pursuing such aims could unleash ethnic or tribal loyalties into a potent political force. The new Soviet policies therefore stressed elements of both change and continuity. In the 1920s, the Soviet government -- wary of potential pan-Islamic sentiment -- divided these Muslims into numerous nationalities with their own specified territories. With the object of ultimately eradicating ethnic differences, Soviet planners thus simultaneously created new ethnic identies, and catered to local ethnic consciousness to overcome any fear of potential Russian domination. By using intentionally ambiguous policies to impose change over an entire society, Soviet planners hoped that Central Asians would voluntarily integrate themselves into the Soviet state.

While there were certainly fluctuations in Soviet policy between accomodation and coercion throughout the Soviet period, over the past seventy years, large numbers of Russians and Slavs have come into the region, bringing Soviet policies, culture and attitudes with them. The accompanying economic and social change has been impressive: a large scale industrialization drive was begun; Soviet style buildings and homes were erected everywhere; the literacy rate among Soviet Muslims reportedly rose from about 1% of the population (age 9-49), to somewhere between 97 and 99%; locals began to learn Russian.

The result in Soviet Central Asia has been a blend of different worlds, with distinctions between Asian and European, religious and secular, ancient and modern no longer as clear as they were just a few decades ago. Today, a Central Asian professor at a local institute might teach courses on Marxism in the morning, and then barter lambs, pomegranates or tomatoes in the local market in the afternoon, just as his ancestors did centuries ago. Local teenagers might spend one evening celebrating a wedding or circumcision strictly according to traditional and religious rules, and then spend the next evening dancing Western rock and roll in a local discotheque or studying for exams on scientific atheism.

And these dualities are reflected in the political realm and areas of individual identity as well. Today, local citizens can be Uzbeks, Tadzhiks, or any one of the other Muslim nationalities in the USSR without necessarily being Muslim "believers". Those who call themselves "believers" may mean quite different things from one to another, and may not necessarily be ideologically opposed to Moscow. Some Central Asians may consider themselves first as "Uzbeks", "Central Asians" or even "Soviet citizens", and only then as Muslims. And just as easily, they might be all these things at the same time. It is not uncommon to run across the local Party official in Central Asia who professed atheist and Communist ideals at work, but who also insisted on observing certain "traditions" that were nothing less than Islamic rites taken straight from the Koran. For the most part, they have seen no conflict in this: different loyalties appear to be relevant at different times. The way Central Asians define themselves often seems to depend on the issue or the context.

In the years before Gorbachev, this contextual nature of different identities comprised the crux of Moscow's policy towards the Central Asians: to ensure that no issue would arise that could possibly unite all Central Asians, or Muslims, or any one of the individual nationality groups, against Moscow. In every area where it seemed that Muslims might have common interests opposed to Moscow -- eg religion, language, economic behavior, and the like -- the Brezhnev leadership tried to keep open a number of safety valves.

In the area of religion, for example, after seventy years of Soviet rule, Islam still occupies a prominent role in Soviet life; but it is also an ambiguous one. Central Asian Muslims comprise a diverse group who traditionally have led quite separate lives. Several recent surveys in Soviet Central Asia have suggested a wide range in the way the indigenous nationalities perceive the role of Islam in their own lives, and what it means to be a Muslim may mean very different things to different people. Many seem to fall in the fuzzy area where Islamic tradition and ritual remain strong, but where there is limited knowledge of the religious content. This has only been complicated by official Islam in Central Asia, that has adapted their interpretations of Islam itself to fit the realities of Soviet life.

In more political terms, as elsewhere in the Muslim world, Soviet Muslims are often deeply divided among themselves -- on issues of faith as well as on secular issues -- and tensions among them are often quite high. One of the first "racial riots" I heard about in Tashkent University was between Uzbeks from different regions of Uzbekistan; amidst the rock throwing and name calling, no Russians were involved. Today, long-standing tensions between Tadzhiks and Uzbeks, and among others of the local nationality groups, often arise.

While formally anti-religious, the Brezhnev leadership seemed to adopt policies that would keep the place of Islam ambiguous. The myriad signs in Soviet museums attacking religion as the opium of the masses; the strong atheist teaching in the schools; and the heavy anti-religious propaganda that permeates all aspects of Central Asian life all underlined the fervor with which Moscow has been committed to eradicating Islam in its republics.

But simultaneously, Moscow continued to provide a number of safety valves for religious feeling in the area itself. This was intended both to control religious sentiment in the region, and to court the favor of Muslim nations throughout the world. At the same time that school children were being asked to write essays in school denouncing religion as the opium of the masses, Moscow officially kept some mosques running and the mullahs well paid. For almost 40 years, the Muslim Religious Board for Central Asian and Kazakhstan has been "actively working to enhance all aspects of religions affairs," sponsoring a good number of international Islamic conferences every year. At

about the same time that the Institute of Scientific Atheism was established as aprt of the Academy of Sciences (1962) and as Houses of Scientific Atheism were opened in the Union republics, a new journal "Muslims of the Soviet East" was established lauding the accomplishments of Muslims under Soviet rule. The Grand Mufti of the Muslim Religious Board traditionally meets with literally hundreds of foreigners every year, and Soviet Central Asia plays host to several international Islamic conferences each year.

This two-sided policy ostensibly diminished the potential political impact of Islam: no Soviet Muslim could argue convincingly that freedom of religion is denied. Certainly underground and informal religious activities continued, and were often very strong. But the policy of keeping the issue of Islam ambiguous in some ways left the Muslim communities in the USSR fragmented, in part appeased, and without a clear-cut issue that could possibly divide all Muslims from non-Muslims, or unite all Muslims against Moscow.

These ambiguous policies were mirrored in the cultural realm. Throughout the Brezhnev era, for example, a number of conferences were organised, and resolutions passed, to increase Russian language training and use in the Central Asian republics. The number of hours that Asians were required to study Russian in schools was increased, while the number of hours that a Russian had to study the local language was reduced.

But especially after riots erupted in the neighboring republic of Georgia in the mid 1970s against the more forceful imposition of Russian there, these policies were accompanied by others that also encouraged the use of the local languages. Every year, more items of Western and Soviet literature were translated into native languages in all the Central Asian republics, and local printing houses were publishing increasing numbers of newpapers and journals in the local dialects.

Finally, another way that Soviet policy, at least until recently, provided a safety valve was in allowing a good deal of private enterprise, if not economic crime, to flourish. Economic problems the world over may bring ethnic sensitivities to the fore. If one ethnic group views itself as economically disadvantaged relative to another -- or if living standards decline, regardless of which groups are hurt most -- ethnic or national identity often becomes the banner under which local interests are expressed.

Published Soviet statistics throughout the 1970s and early 1980s indicated that high population growth in Soviet Central Asia, coupled with slow economic growth, were leading to both an apparent labor surplus and exceedingly low per capita availability of goods and services. In the late 1970s, far less food, and far fewer consumer goods and services were available in Soviet Central Asia than for the all Union average. Even well into the 1980s, per capita consumption of meat was reported to be just 26% of the Soviet medical norm, and of milk, 42% Since most of the lowest wage earners -- ie, those in the agricultural and service sectors -- and the "unemployed" populations were indigenous Central Asians, it could have been assumed that these pressures would have affected the local nationalities most.

But the outward disadvantage of the Central Asians relative to the Russians was largely offset by the unofficial, or "second" economy that was allowed to function, and by Soviet affirmative action policies to bring indigenous Central Asians into the mainstream of the Soviet economy. Shortages of goods and services were compensated for by the very large scale second economy -- especially in the agricultural and service sectors where the local Central Asians tended to predominate. Even according to Soviet official statistics, the second economy has represented a much larger part of the Central Asian economy than other parts in the USSR; according to one Soviet report, one third of the USSR's citizens not engaged in social production live in Uzbekistan alone, while the Uzbek rural population derives 60-65% of its income from private farming. The policy of permitting such large scale private economic activity acted not only to meet economic demand in Soviet Central Asia, but also as a safety valve to offset potential discontent. At the same time, affirmative action policies allowed the indigenous Central Asians far greater job opportunities than Russian purely on the basis of nationality.

While trying, then, to abolish religion, impose Russian language, inculcate Soviet values and make the Central Asian economy function more effectively, the Brezhnev leadership seemed to turn a blind eye to a good deal of economic abuses, and made a number of concessions in the religious and cultural areas. These factors together comprised what I have called an "uneasy compromise" in Central Asia, muffling any expressions of political discontent.

It seemed that this "uneasy compromise" would be effective in circumscribing discontent as long as Moscow didn't do one of two things: either crack down on the private economy and on affirmative action without making sure the socialized economy would be able to fill the resulting gaps in production and consumption of goods, services and jobs; and/or crack down in the religious or cultural arenas, such as language teaching, religion, or exerting political control in a heavy handed way from Moscow.

Effects of *Perestroika*

But under the banner of *Perestroika*, the Gorbachev leadership did both of these things. In a drive to raise efficiency and cut down on abuse, the first two years under Gorbachev's leadership saw a strong campaign to eradicate political and economic corruption and cut down on private economic activity throughout Central Asia. Under the slogan of "struggling against corruption, regionalism and nepotism", more than half of all Central Asian Central Committee members were kicked out in 1986 alone. In Uzbekistan, 80% of the Central Committee members and 90% of the candidate members were dismissed -- as were the majority of party secretaries at lower administrative levels -- and many were replaced by Russians. According to Pravda, about 2,600 officials in Uzbekistan alone were kicked out, fined or otherwise disciplined in the drive against corruption and inefficiency. Tens of thousands were expelled from local Communist Party membership, for many, a preliminary to prosecution. This included Party Secretaries at all levels of the Party leadership, as well as law enforcement officials, shopkeepers, and the like. By the end of 1986, four out of five of the leaders of the Central Asian republics had been removed; the fifth died, allegedly by suicide as an investigation into his tenure as First Secretary began.

The practice of affirmative action was also curtailed, as the new Gorbachev leadership adopted a nationality-blind approach to personnel assignments and economic planning. Similar to debates in the West, Gorbachev stated that cadres should be selected on the basis of their ability, not nationality. According to some reports, the new leadership sent down Slavic cadres to staff key local positions.

Perhaps most importantly, however, were the unintended economic effects of the reforms themselves. Through such mechanisms as cooperatives, the Gorbachev reforms expanded the amount of private activity permitted under Soviet law. But a greater emphasis on law enforcement meant that tougher measures were also introduced for activity not expressly permitted. Certainly in the northern parts of the USSR, where private economic activity has generally been more limited, these measures would be perceived as an economic liberalization. But in a region such as Central Asia, where unofficial private activity was already such an important part of the economy, the requirements that this activity be registered and monitored, and that taxes be paid, ironically was perceived as constricting economic activity rather than expanding it.

In the religious and cultural arenas, the new Gorbachev leadership initially also cracked down harder than its predecessors. On his first visit to Tashkent as the new General Secretary, Gorbachev issued one of the fiercest attacks on Islam uttered for some time. In his speech of November 24, 1986, he called for an "uncompromising struggle against religious manifestations" in Central Asia. He stated that people in responsible positions who "pay lip service" to our morals and ideals but themselves participate in religious ceremonies must be "made to answer for their behavior", and initiated a strong crackdown on komsomol and Party members who participate in religious ceremonies. The effects of this speech were made all the more poignant by the much more conciliatory stance taken towards the Russian Orthodox church during the millennium of Eastern Slavic Christianity.

Finally, the Gorbachev leadership initially attempted to "Russianize" Central Asia more forcefully than their predecessors, particularly by imposing more Russian language teaching, and replacing local cadres with Slavs. According to several reports, Moscow began sending Russian language teachers down from the Russian republic and the Ukraine to step up Russian language training there. The largest contingent ever of graduates of the Russian language and literature faculties of pedagogical institutes in the RSFSR and the Ukraine -- more than 1000 graduates -- were scheduled to work in Uzbekistan alone in the current school year.

The net effect of these policies was that while perestroika may have been

viewed as a "democratizing" force in many parts of the country, it was largely viewed as reactionary here. In my visit last year, many Asians commented that it was more difficult to find basic foodstuffs and consumer goods than just a few years ago, and seemed ever more watchful of the Soviet authorities in their midst.

Some of these harsh policies may recently have been relaxed. Several new mosques have been opened, and plans have been approved to expand the student bodies of the country's only two training establishments for Islamic religious functionaries. Teaching of Arabic script in the native language publications of several Central Asian republics has been gaining momentum and has been tolerated. While the crackdown on corruption remains in force (as illustrated in the removal of Mr. Khabibullaev, Chairman of the Presidium of Uzbekistan's Supreme Soviet, in January, and the sentences imposed during the Churbanov trial to six Uzbek officials last December), Moscow appears to have abandoned an aggressive personnel policy, leaving an ethnic balance in most positions pretty much what it was before he took power. And new draft laws call for giving more responsibility to the republics, including Central Asia, over many more aspects of local economic, environmental and social affairs.

But so far these represent small steps, and may be raising new questions of their own. The fact that many local Central Asian elites, despite an initial crackdown, remain more or less where they were before suggests potential problems in Moscow-Central Asian relations. And questions have arisen whether the effect of the new draft laws might in fact take a heavier toll on Soviet Central Asia than on other republics, by potentially diminishing the heavy subsidies -- totalling roughly 5 billion rubles (around $8 billion) in 1988 -- now coming from Moscow to the Central Asian republics.

Challenges for Moscow

Compounding all of these issues has been the greater openness in public discussion (*glasnost'*) While not on the same scale as in other republics, informal groups and small demonstrations () have been calling for increased local language use, greater cultural freedom, more authority over their own

economic decision making. Student demonstrations have been held in almost all of the Central Asian republics, calling for local languages to be made the official language of the republics.

More recently, *glasnost'* has also been raising new, perhaps more serious challenges, as discussions health, environment, balanced economic development, lack of water, etc. become imbued with a strong nationalist cast. Chief among these are the economic dislocations that have accompanied the specialization of the republics, and chiefly the effects of the focus on cotton in the republics of Turkmenistan and Uzbekistan; the environmental havoc this has wrecked on the region; and the appalling health situation in the Central Asian populations.

For example, in Uzbekistan and Turkmenistan, the traditional focus on cotton is now being labelled as exploitation from Moscow, a policy that diverted a significant share of resources from the local population, and has caused the environmental devastation of their republics. Large scale use of dangerous pesticides has polluted drinking water and caused terrible damage to the environment. The Soviet Minister of Health for the Turkmen SSR, K. Chagylov, recently described the Amu Darya -- one of the two main rivers that are virtually Central Asia's only water supply -- as "little more than a sewage ditch". In Uzbekistan alone, the Soviet press has reported that close to one third of communal water systems do not meet modern sanitary standards. According to other Soviet reports, one fifth of the population -- and half of the population in rural areas -- does not have access to drinking water systems; they must drink water straight from irrigation ditches and canals, many of which are contaminated.

The much publicized shrinking of the Aral Sea has become a nationalist symbol of the environmental problems plaguing the Central Asian republics. The Aral Sea was once the world's fourth largest inland body of water. But because the water from its tributary rivers has been used for irrigation, the sea bed has been drying up. Soviet scientists have predicted that at present rate of evaporation -- 40 cubic km per year -- the sea bed will be completely dry by year 2010.

The Central Asian population is also becoming increasingly vocal about the health effects of these catastrophes. Today, every third infant that dies

in the Soviet Union is from the Central Asian region. While infant mortality rates declined in nine of the fifteen Soviet republics between 1970 and 1986, it rose in the Central Asian republics by as much as 49% in Uzbekistan (from 31 to 46.2 per thousand births) and 26% in Turkmenistan (from 46.1 to 58.2 per thousand). Infectious diseases are increasingly cited as the main culprit -- especially gastrointestinal infections, hepatitis, tuberculosis, and even leprosy. In some Central Asian oblasts, one infant in ten dies before reaching the age of one year.

Today, Central Asia's infant mortality rates are among the highest even in the developing world. The average life span in a typical village in the Karakalpak Autonomous Republic, allegedly due to ecological catastrophes, is between 38-42 years. At the same time, official efforts to limit family size or introduce family planning have in some quarters led to quiet cries of genocide.

It is these kinds of issues that may now present the greatest challenges to Moscow, rather than questions of Islam per se. Indeed, there is little sign that resurgent Islam has played a major role in any of the demonstrations or outbreaks of violence that have occurred in Central Asia over the past two years. Instead, a group of primarily Uzbek writers who have banded together in the "Committee to Save the Aral Sea" were recently castigated by Uzbekistan's First Secretary for "slanderous attacks and bellowing directed towards the leadership." Other groups have been directly criticized for "nationalistic" activities.

Not all of these issues unite Central Asians against Moscow. Questions of family planning and health have become the subject of intensely heated debate not just with Moscow, but among Central Asians themselves. But as the experience of Nagorno-Karabakh or the recent Georgian demonstrations show, inter-ethnic disputes, or disputes within particular ethnic groups can rapidly become directed against Moscow.

An Uzbek poet in Uzbekistan said to me last year: "When a peaceful dog is hit with a stick many times, eventually it will bite." The Central Asians could descend on Moscow like a pack. But if they do, it is unclear whether they will do so over issues of Islam or in pursuit of other more immediate

interests of concern to the local populations. It is also unclear whether they will do so as Central Asians, as Muslims, or in the name of their individual ethnic and nationality groups. And it is also unclear, as environmental, economic and other pressures grow, whether they will start a dogfight among themselves.

Before Gorbachev, a combination of accomodation and coercion created an uneasy compromise in Central Asia. Perestroika has upset this compromise, and it is unclear what the end result will be. Surely it is possible that the common view of Soviet Muslims uniting against Moscow may turn out to be correct. A key point here, however, is that if U.S. planners focus primarily on the Islamic dimension, we may blind ourselves to many of the other subtleties that ultimately may be the key to the most serious challenges that Central Asians might pose to the Soviet empire.

Senator MOYNIHAN. Thank you, Dr. Lubin. I think you gave Professor Horowitz an opportunity for his comparative mind to be working. You tell us that perestroika is to present-day Uzbekistan as reform was to 19th century Tammany Hall. Is there some pattern there?

Dr. LUBIN. That parallel has been drawn often, actually.

Senator MOYNIHAN. Dr. Dunlop, we welcome you to the committee, sir.

STATEMENT OF DR. JOHN B. DUNLOP, SENIOR FELLOW, HOOVER INSTITUTION ON WAR, REVOLUTION AND PEACE, STANFORD, CA

Dr. DUNLOP. Thank you, Senator. The extraordinary surge of nationalism in the Baltic region and in the Caucuses has helped spark a growth of national sentiment throughout the Soviet Union. Areas which had not previously witnessed a strong nationalism, like Byelorussia, have begun to pulsate with a sense of national awakening. Nationalism has been percolating in Moldavia and in the Ukraine, and there have been national and Islamic stirrings in the Muslim republics.

Perhaps the single most important product of glasnost, however, has gone largely unnoticed in the West: the remarkable rise of nationalism and religio-nationalism in the Russian Republic itself. The failure to "see" this last-named phenomenon, with the exception of the antics of a lurid fringe group, Pamyat, has been part of a consistent historical trend in the United States. Even though Russians represent the ethnic linchpin of the Soviet Union, Americans have traditionally not shown much interest in them as a distinct national group.

In American universities, one finds centers for study of the Ukraine, Central Asian studies, Soviet Jewish studies, and so forth, but not a single center for the study of ethnic Russia. This despite the fact that Russians make up approximately one-half the Soviet

population. If this bizarre oversight was unfortunate in the past, today it may directly affect American national security interests.

In comments made during a recent round table discussion of national relations under socialism, L.M. Drobizheva, deputy rector of the Institute of Ethnography of the U.S.S.R. Academy of Sciences, noted that there had been attempts in the 1960's and 1970's ideologically to activate the national feelings of ethnic Russians living in the Soviet Union. But, she continued, the attempt to heat up the national feelings of the Russian people at that time failed to affect mass awareness.

By contrast, Drobizheva observed, "things are completely different now. The mid to late 1980's have given us a mass upsurge in the national awareness of peoples, including the Russian people. During these years we have been witnesses to an active growth of national self-awareness on both the ideological and personal level and in every day life. It is enough to recall," she continues, "the popularity of the ideas expressed by writers V. Rasputin and V. Astafyev, and the movements for the preservation of historical monuments."

Dr. Drobizheva is correct in her assessment. We have indeed been witness to an extraordinary activization of the national feelings of ethnic Russians. In such nationalist-minded publications as "Nash Sovremennik," "Moskva," "Molodaya Gvardiya," "Literaturnyaya Rossiya," and "Moskovskiy Literator," one encounters calls for the formation of a Russian party Central Committee—the other republics presently have their own party Central Committees while the RSFSR does not; for a Russian Academy of Sciences; for a Russian KGB; for separate television and radio programs which reflect the ethnic needs of Russians and of the minority peoples living in the RSFSR; for a Russian large format weekly along the lines of the magazine Ogonyok.

An all-Russian Academy of Painting, Sculpture and Architecture has already been formed under the rectorship of Russian nationalist artist Ilya Glazunov.

In Samizdat, Russian nationalists are pushing for the opening of thousands of Orthodox churches, as well as scores of monasteries and new seminaries. Approximately 14,000 Orthodox churches were closed down during the Khrushchev antireligious campaign of 1959 to 1964. Gorbachev to date has opened some 500 to 700 Orthodox churches.

In December 1988 there came into existence a Christian Patriotic Union headed by a well-known former political prisoner, Vladimir Osipov which, among its programmatic goals, advocates the holding of RSFSR-wide and U.S.S.R.-wide referendums to decide the vital political and economic questions confronting ethnic Russians and the other peoples of the Soviet Union.

Contemporary Russian nationalists are concerned—even obsessed—with the fate of the Russian national environment and of Russian historical monuments, particularly ancient churches. They are also anxious over the condition of ethnic Russians themselves, subject as they are to such plagues as rampant alcoholism, a plummeting birth rate, and a rising incidence of mortality.

Russian nationalism has also become a significant factor in the brutal political power struggle—some of its participants call it a

civil war—which is presently taking place within the Soviet leadership and among Soviet elites. Gorbachev is a Soviet patriot, not a Russian nationalist, but he has sought to split the ranks of the nationalists by attempting to co-op influential liberal nationalists such as academician Dmitri Likhachev. He has also made conspicuous overtures to the Russian Orthodox Church, seeking to split religious believers off from the nationalists.

Despite these efforts on the General Secretary's part, however, the majority of present-day Russian nationalists appear, at least temporarily, to have sided with Gorbachev's political opponents. Gorbachev's attempt to relegitimize and reinvigorate Marxism by going back to the 1920's and to the Khrushchev period for a new pool of ideas has not proven popular with the nationalists, while his opening the doors to Western mass culture such as rock music, beauty contests, cheesecake, nudity in films, and so forth, has been regarded by them with abhorrence.

In deciding to release the genie of Russian nationalism, Gorbachev's opponents have taken a political risk. Influential voices are being heard among the nationalists, for example the voices of artists Ilya Glazunov and writer Vladimir Soloukhin, to the effect that Marxism-Leninism should be jettisoned as the ruling ideology of state. It may be difficult to return this genie back to the bottle.

It should be noted that if Marxism-Leninism were to be jettisoned as the ruling ideology, then the future breakup of the Soviet empire would be virtually assured. Alain Besancon has astutely noted that a Russian national state, as opposed to a Marxist-Leninist one, would be unable to hold the minority republics even if it wished to do so. "Once the ideological magic has been destroyed," he observes, "there would be only one source of magic left—the imperial or colonial legitimacy of the Russian people in a world that today is entirely decolonized."

A final point: In seeking to understand and to evaluate the phenomenon of Russian nationalism, American policymakers should beware op-ed Cassandras who see the recovery of Russian national self-awareness as something to be feared. In the recent elections to the Congress of People's Deputies, ethnic Russians, like the other peoples of the Soviet Union, showed considerable political maturity. They demonstrated that what they want is democracy and the improvement of their material and spiritual lot.

Thank you.

[The prepared statement of Dr. Dunlop follows:]

PREPARED STATEMENT OF JOHN B. DUNLOP

The Upsurge of Russian Nationalism under Gorbachev

The extraordinary surge of nationalism in the Baltic region and in the Caucasus has helped spark a growth of nationalist sentiment throughout the Soviet Union. Areas which had not previously witnessed a strong nationalism, like Belorussia, have begun to pulsate with a sense of national awakening. Nationalism has been percolating in Moldavia and in the Ukraine, and there have been national and Islamic stirrings in the Muslim republics. Perhaps the single most important product of glasnost, however, has gone largely unnoticed in the West: the remarkable rise of nationalism and religio-nationalism in the Russian Republic itself.

The failure to "see" this last-named phenomenon--with the exception of the antics of a lurid fringe group, Pamyat--has been part of a consistent historical trend in the United States. Even though Russians represent the ethnic linchpin of the Soviet Union, Americans have traditionally not shown much interest in them as a distinct national group. In American universities, one finds centers for Ukrainian studies, for Central Asian studies, and for Soviet Jewish studies, but not a single center for the study of ethnic Russia. This despite the fact that Russians make up approximately half the Soviet population. (The next largest ethnic group, the Ukrainians, comprises approximately 17% of the population.)

If this bizarre oversight was unfortunate in the past, today it may directly affect American national security interests. In comments made during a recent round-table discussion of "national relations under socialism," L. M. Drobizheva, deputy rector of the Institute of Ethnography of the USSR Academy of Sciences, noted that there had been attempts in the 1960's and 1970's "ideologically to activate" the national feelings of ethnic Russians living in the USSR.[1] But, she

continued, "the attempt to heat up the national feelings of the Russian people at that time completely failed to affect mass awareness. These tendencies were known only to a narrow circle of the intelligentsia."

By contrast, Drobizheva observed: "Things are completely different now. The mid to late 1980's have given us a mass upsurge in the national awareness of peoples, including the Russian people. During these years, we have been witnesses to an active growth of national self-awareness on both the ideological and personal level, and in everyday life. It is enough to recall the popularity of the ideas expressed by [writers] V. Rasputin and V. Astafyev, and the movements for the preservation of historical monuments. Sociological research also testifies to the actualization of national self-awareness on the personal level. Thus, during polls conducted in Moscow at the end of 1987, more than half of the Russians contacted considered that it was more important to spend funds for the preservation of historical monuments than even for the construction of hospitals and housing."

Dr. Drobizheva is correct in her assessment. We have indeed been witness to an extraordinary "activization" of the national feelings of ethnic Russians. In such nationalist-minded publications as Nash Sovremennik, Moskva, Molodaya Gvardiya, Literaturnyaya Rossiya, and Moskovskiy Literator, one encounters calls for the formation of a Russian Party Central Committee (the other republics presently have their own party central committees, while the RSFSR does not); for a Russian Academy of Sciences; for a Russian KGB [!]; for a separate capital for the Russian Republic; for programs on Soviet radio and television which reflect the ethnic needs of Russians and of the minority peoples living in the RSFSR; for a Russian large-format weekly along the lines of the magazine Ogonyok. An All-Russian Academy of Painting, Sculpture, and Architecture has already been formed under the rectorship of Russian nationalist artist Ilya Glazunov.[2] There are also calls for a Russian Encyclopedia (the last such encyclopedia was published over a hundred years ago) and for a new history of Russia.[3]

In samizdat, Russian nationalists are pushing for the opening of

thousands of Orthodox churches, as well as scores of monasteries, and new seminaries. (Approximately 14,000 Orthodox churches were closed down during the Khrushchev anti-religious campaign of 1959-1964; Gorbachev has to date opened some 500-700 Orthodox churches.[4]) In December, 1988, there came into existence a "Christian Patriotic Union," headed by a well-known former political prisoner, Vladimir Osipov, which, among its programmatic goals, advocates the holding of RSFSR-wide and USSR-wide referenda to decide the vital political and economic questions confronting ethnic Russians and the other peoples of the Soviet Union.[5] The CPU, as it calls itself, intends to run candidates for office and to contest the CPSU (i.e., the Communist Party of the Soviet Union) for power and influence throughout the Russian Republic. The new organization has entered into contact with several Christian Democratic parties in Western Europe.

Contemporary Russian nationalists are concerned, even obsessed, with the fate of the Russian natural environment and of Russian historical monuments, particularly ancient churches. They are also anxious over the condition of ethnic Russians themselves, subject as they are to such plagues as rampant alcoholism, a plummeting birth rate, and a rising incidence of mortality. On economic questions and on questions of political structures, they are in disagreement, some being strong statists and others seeking to liberate the individual and his economic initiative from the shackles of the state. On the issue of relations with the West, views range from a sense of friendly competition to sentiments of strong hostility. With the exception of anti-Semitic sentiment, there has until recently been little animus toward the minority peoples of the USSR, but this situation may be changing, as minority nationalities begin to push hard for their agendas.

Russian nationalism has become a significant factor in the brutal political power struggle--some participants term it a "civil war"--which is presently taking place within the Soviet leadership and among Soviet elites. Gorbachev is a "Soviet patriot," not a Russian nationalist, but

he has sought to split the ranks of the nationalists by attempting to co-opt influential "liberal" nationalists such as Academician Dmitri Likhachev, head of the Soviet Cultural Foundation, and Sergei Zalygin, editor of the journal Novy Mir.[6] He has also made conspicuous overtures to the Russian Orthodox Church, seeking to split religious believers off from the nationalists.[7]

Despite these efforts on the general secretary's part, the majority of present-day Russian nationalists appear, at least temporarily, to have sided with Gorbachev's political opponents. Gorbachev's attempt to religitimize and reinvigorate Marxism by going back to the 1920's and to the Khrushchev period for a new "pool of ideas" has not proven popular with the nationalists, while his opening the doors to Western mass culture (rock music, beauty contests, cheesecake, nudity in films, etc.) has been regarded by them with abhorrence.

It should be underlined that Gorbachev's opponents at the top party level are also not Russian nationalists, but rather conservative Marxist-Leninists. In an attempt to stop the Gorbachev juggernaut, or at least to slow it down, they have, however, consciously chosen to unleash Russian nationalism. Major newspapers like Pravda, whose editor, Viktor Afanasyev, is a Gorbachev opponent, and Sovetskaya Rossiya, the daily paper of the Russian Republic, are now energetically trumpeting such nationalist causes as protection of the environment and the recovery of pre-revolutionary Russian history.

In deciding to release the genie of Russian nationalism, Gorbachev's opponents have taken a political risk. Influential voices are being heard among the nationalists—for example the voices of artist Ilya Glazunov and writer Vladimir Soloukhin—to the effect that Marxism-Leninism should be jettisoned as the ruling ideology of state. It may be difficult to return this genie back to the bottle.

It should be noted that if Marxism-Leninism were to be jettisoned as the ruling ideology, then the future breakup of the Soviet empire would be virtually assured. Alain Besancon has astutely noted that a Russian national state--as opposed to a Marxist-Leninist one—would be

unable to hold the minority republics even if it wished to do so. "Once the ideological magic has been destroyed," he observes, "there would be only one source of magic left--the imperial or colonial legitimacy of the Russian people in a world that today is entirely decolonized. This anachronistic legitimacy would immediately stimulate the resistance of the non-Russian nations, who would call forth their own legitimacies, necessitating military occupation. The Russian people is not sufficiently populous for the task."[8]

A final point: in seeking to understand and to evaluate the phenomenon of Russian nationalism, American policymakers should beware op-ed Cassandras who see the recovery of Russian national self-awareness as something to be feared. In the recent elections to the Congress of People's Deputies, ethnic Russians, like the other peoples of the Soviet Union, showed considerable political maturity. They demonstrated that what they want is democracy and the improvement of their material and spiritual lot.

* * *

In the second section of this paper, I propose to examine the views of an individual who serves as the inspirational leader of the Russian nationalists presently struggling against the Gorbachev forces: Valentin Rasputin. Since the "mind" of the contemporary Russian nationalist is not readily comprehensible to most Americans, a detailed analysis of his thought is necessary as an act of mediation.

Along with writer Yuri Bondarev, Rasputin is probably the most important spokesman among contemporary anti-Gorbachev Russian nationalists. It is no accident that it was Rasputin who gave the keynote address at the Ryazan RSFSR writers' plenum in October, 1988, which signalled that Russian nationalism was being fully unleashed as a counterforce to Gorbachev's reformist Marxism.[9] The Ryazan meeting was savagely attacked in an unsigned editorial appearing in the Gorbachevite party theoretical journal, Kommunist, and on the pages of Ogonyok.[10]

The attack, however, was beaten off by the nationalists, and, when the editor of Literaturnya Rossiya, Mikhail Kolosov, sided with the Gorbachev forces, he was summarily removed from his post in January, 1989.

Many literary critics consider Rasputin to be the most gifted ethnic Russian prosewriter currently living in the Soviet Union. His reputation among his fellow Soviet writers is very high. Thus at the January, 1989 plenum of the Directorate of the USSR Writers' Union, which chose candidates for election to the Congress of Peoples' Deputies, Rasputin was one of five writers chosen on the first ballot.[11] Gorbachevite writers like Evgeny Evtushenko, Andrey Voznesensky, and Vitaly Korotich, by contrast, were passed over on both the first and second ballots. Yuri Bondarev chose to run as a Communist Party delegate.

Rasputin was born in 1937--the year of Stalin's great terror--in the small Siberian village of Atalanka, located on the shores of the Angara, a powerful river which flows out of Lake Baikal, the largest freshwater body in the world. Atalanka represented the outer boondocks and was about as far from "civilization" as one could come from. Rasputin spoke a peasant dialect so thick that, when he first moved to Irkutsk, he had difficulty in making himself understood.

Rasputin has said, "I am from the ranks of the drowned."[12] His native village, like many of those along the Angara River, was intentionally flooded as a result of the construction downriver of several dams and hydroelectric stations. When segments of the "drowned" villages would subsequently bob up to the surface of the river, they were bombed from airplanes.

The displaced villagers were moved to squalid semi-urban settlements located near the river. Instead of farming as they had previously done, the villagers then eked out a living by chopping down (and not replacing) the vast Siberian forests near the river.

Rasputin attended the Historical-Philological Faculty of Irkutsk State University, from which he graduated in 1959. He began writing in

1961, during the Khrushchev cultural thaw, and, in 1967, his first major work, the tale (*povest'*), *Money for Maria*, brought him instant recognition. It has been said that, "a great writer is recognized immediately." In Rasputin's case, at least, this dictum turned out to be true.

Rasputin's tale *Live and Remember* (1974) won him a prestigious State Prize, but his next work, *Farewell to Matyora* (1976), earned him the strong disapproval of the authorities. A powerful, quasi-allegorical work, *Farewell* called into question the whole phenomenon of breakneck modernization. Having an obvious autobiographical basis, the tale recounts the fate of the inhabitants of an island, Matyora, in the last few summer months preceding their evacuation to the mainland. Their evacuation is required by the construction downriver of a huge hydroelectric plant which will cause the level of the river to rise, inundating Matyora and other nearby islands.

In a reading of *Farewell*, it soon becomes apparent that Rasputin has little sympathy for modern industrialized Soviet Russia, at least in its present form. The elderly grandmother, Darya, who speaks for Rasputin, believes that modern man has grown proud, has sought to clamber out of his "human skin," has uprooted himself from the earth, from nature, and from God. As for modern cities, they remind her of the frenetic scurrying of ants and the swarming of midges.

The flooding of Matyora—a place name derived from the word *mat'* (mother)—will culminate a process of national matricide. The very Russian earth, family cemeteries, venerable churches (Matyora's church has been converted into a storehouse and its crosses have been knocked off)—all are being sacrificed for "electricity" and the specious cult of progress touted by Soviet prometheans. It is not that Rasputin scorns the fruits of modern civilization, nor that he is obsessed with *byt* (mores). But modern Russia, he believes, must be rooted in the mind and wisdom of centuries-old traditional Russia. If not, then fire and flood must inevitably ensue.

The publication of Farewell in 1976 was followed by nearly a decade of silence until Rasputin's next major work, The Fire, appeared in the No. 7, 1985 issue of the Russian nationalist journal, Nash Sovremennik. According to an account published in The New York Times, Rasputin was twice badly beaten by hooligans: once in 1977, a year after the publication of Farewell, and once in 1981. After the second beating, he was reported to be suffering from severe headaches and "an unceasing flow of tears."[13] Irkutsk is a notoriously violent city, but there is a possibility that the attacks were politically motivated.

During the years when he was politically out of favor, and perhaps in physical danger, Rasputin consistently exhibited integrity, courage, and what Russian village prose writer Vladimir Soloukhin has called his "Siberian, truly iron character."[14]

Following the death of Brezhnev and the kaleidoscopic Andropov and Chernenko interregna, there arrived the Gorbachev political and cultural thaw. Over the years, one had heard rumors that Rasputin was at work on a sequel to Farewell, which would show what happened to the island dwellers once they had been resettled on the mainland. As has already been mentioned, the sequel, entitled The Fire, appeared in the summer of 1985. It was the first major cultural event of the nascent Gorbachev thaw, and it won its author another State Prize.

At the time it appeared, Rasputin's tale still had to pass a fairly rigorous censorship. According to critic Igor' Zolotusskiy, the epigraph to the tale was suppressed. It reads: "The native village burns and burns."[15] The tale's original ending was also snipped off by the censors, but enough of the work remained for it to become a cultural and political event.

The central hero of The Fire, Ivan Petrovich, is putting in his last week of work before retirement at the semi-urban settlement of Sosnovka, on the banks of the Angara River. Twenty years previously, he and his family had been resettled from a traditional Russian village, Egorovka, so that that area could be flooded. Sosnovka is a squalid

workers' settlement where, we are told, one cannot put down roots. The town's sole industry is to hack down the surrounding forest.

A fire breaks out in the town's storehouses, and as it races along consuming bloated sausages, vats of butter, vodka bottles, and imported sweaters, Ivan reflects on his past life as he joins in the disorganized and futile effort to save the town's material goods. We learn that a band of hooligans, the arkharovtsy, have in effect taken over the settlement, preying on its inhabitants. There have always been drunkards in Holy Russia, Ivan reflects, but now they are organized.

Ivan recalls that over the past four years as many Sosnovka dwellers have died from drunken shootings, knife flights, and alcohol-related drownings as perished in his native Egorovka during the Second World War. The moral code by which the people in the village lived has been stood on its head: "...what was forbidden and not acceptable has now become permitted and acceptable...What was considered a disgrace and a mortal sin is now respected as deftness and prowess." Or, more simply: "...that which was good has become bad, and that which was bad has become good." This development induces a state of anguish in Ivan, who has always tried to live "according to his conscience."

By the end of the "terrible night" described in The Fire, not only have Sosnovka's warehouses been reduced to rubble, but the arkharovtsy have murdered the one-armed watchman, Misha, who attempted to prevent their plundering the town's liquor.

At the work's end, Ivan is in a mood of grim despair. The pillars of a stable, moral community, he reflects, are under siege. Those pillars are: "a home with a family; work; the people with whom one spends holidays and weekdays [i.e., one's friends], and the land."

The tale's ending, which was excised by the censors, reads: "The land keeps silent...how long will you [i.e., the land] keep silent? And will you keep silent?"[16] Some critics have seen these lines as a prophecy of the Chernobyl nuclear disaster.

With the advent of glasnost, Rasputin, a gifted and principled writer, became a social and political force to be reckoned with. When,

in 1987, Soviet intellectuals split into pro and anti Gorbachev groups, Rasputin unhesitatingly sided with the anti-Gorbachev forces. This did not mean, it should be stressed, that he had any sympathy for the programmatic neo-Stalinist views expressed in the "Nina Andreeva" letter published in the March 13, 1988 issue of Sovetskaya Rossiya. Andreeva, it will be recalled, defended collectivization and military-industrial expansionism, and was vehemently opposed to religion. Such views are anathema to Rasputin. During the attempt to rehabilitate Solzhenitsyn and to publish excerpts from The Gulag Archipelago, which took place in the summer and fall of 1988, Rasputin sided with radical reformers who wanted to publish Solzhenitsyn's works.[17] The attempt to rehabilitate the exiled Nobel prizewinner was firmly opposed, on the other hand, by neo-Stalinists, and by Gorbachev's group of neo-Leninists.

Rasputin appears to have sided with the conservative Russian nationalists, whose political leader is Yuri Bondarev, for three principal reasons: first, he vehemently opposes Gorbachev's attempt to religitimize Marxism-Leninism by going back to the 1920's for inspiration and new ideas; though he has to be somewhat cautious in saying it, Rasputin wants to jettison Marxism-Leninism as the USSR's ideology of state. Second, he abhors the process of headlong Westernization being promoted by Gorbachev who, like Peter the Great before him, apparently believes that an assimilation of the Western "mind set" will help to absorb western technology. (This does not mean, it should be emphasized, that Gorbachev wants Western-style political pluralism; he does not.) Finally, Rasputin clearly believes that Gorbachev's program of rapid modernization threatens the Russian environment, Russian historical monuments, and the future well-being of ethnic Russians themselves.

Rasputin's decision to side with the political opposition has been a heavy political blow for the Gorbachevites. They are, of course, aware that he represents a powerful social force and that he is respected and admired by most ethnic Russians for the courage he exhibited during the "period of stagnation" under Brezhnev. Rasputin's

unflagging struggle to preserve the Russian environment and Russian historical monuments appears to enjoy mass support.

In 1988, the Gorbachevites began sniping at Rasputin on the pages of such publications as Ogonyok and Knizhnoe Obozrenie,[18] but they have had to be cautious. Due to the respect with which he is held by present-day Russians, attacks on Rasputin's views, and especially on his person, can be politically counter-productive.

One interesting tack which Gorbachev has taken has been to try to woo another well-known Siberian village prose writer, Viktor Astafyev, over to his side to serve as a counterweight to Rasputin. In a speech published in Pravda in July, 1988, Gorbachev noted that, during a visit to Krasnoyarsk, he had had a lengthy chant with Astafyev about "how people live" in that Siberian city.[19] In early 1989, he included Astafyev in a group of journal editors and intellectuals who were invited to the Central Committee offices. "I know you, Viktor Petrovich," Gorbachev said to Astafyev on that occasion, "as an open and straightforward man."[20] After this investment of political capital, it must have been a disappointment to Gorbachev when Astafyev decided to sign a collective letter to Pravda protesting an attack on Yuri Bondarev which had appeared in the magazine Ogonyok.[21]

The following is a necessarily sketchy survey of Rasputin's views as he has been able to make them known under conditions of glasnost.

Protection of the Environment

Rasputin has emerged as one of the world's most dedicated environmentalists. He was involved in the frenetic struggle to scuttle the so-called "project of the century," a vast river diversion project which would have channeled Russian rivers south to the Ukraine, Moldavia, Kazakhstan, and Uzbekistan. In August, 1986, Pravda announced that the project had been put on hold.

Rasputin has said: "Of the whole cluster of problems which agitate me, I would single out those connected with ecology, and in particular with the preservation of [Lake] Baikal."[22] He has mobilized

public support in the battle to rescue the world's largest freshwater body from industrial waste. Rasputin has stated that he receives "an enormous number of letters, not hundreds but thousands and thousands" from Soviet citizens who support his position on the lake and offer support.[23] In similar fashion, he has exerted himself to rescue the Siberian forests, which, he believes, are being torn down at an alarming rate, without adequate concern for the environmental impact of that process.

Rasputin considers the environment to be a world-wide problem and maintains that efforts to address it must be conducted "not on the level of one country, but on a world-wide scale."[24] The West, he believes, is considerably ahead of the USSR in this regard.

For his unrelenting efforts on behalf of the environment, Rasputin has earned the bitter enmity of Soviet ministers and of Gosplan. He consistently opposes the huge, promethean projects which quicken the blood of the ministries. The ministries, he has stated, "mercilessly plunder the Siberian land."[25]

The Preservation of Historical Monuments

For many years, Rasputin has been involved in the struggle to save Russian historical monuments, particularly old churches, from the wrecker's ball. He has been active in the All-Russian Society for the Preservation of Historical and Cultural Monuments (VOOPIK), a voluntary organization with a multi-million membership.

Rasputin spoke of the plight of Russian historical monuments at a conference of VOOPIK held in July, 1987. In tearing down the monuments, he noted, the authorities employ stealth and deception: "Usually it takes place at night. [For example,] in Irkutsk or in Sverdlovsk. They rush in the bulldozers at night, and people wake up the next morning and see that only rubble remains."[26] The political elite, he believes, are basically indifferent to the fate of the monuments: "In Moscow or in Irkutsk, if they have to put up a house for the elite, then they don't bother with protective zones..."[27]

Preservation of Russians Themselves

Rasputin's views on the preservation of ethnic Russians are more controversial in the West than are his views on the environment or the preservation of historical monuments. He believes that Russians are in jeopardy both biologically and spiritually. They have lost tens of millions of lives during collectivization and the Stalin political terror, and their fertility rate is alarmingly low. Rasputin has been active in the struggle against the blight of alcoholism, which has taken such a heavy toll among ethnic Russians.

As an act of national self-preservation, Rasputin wants deracinated contemporary Russians to return to their historical, cultural and religious roots. A world-wide struggle, he has stated, is presently taking place between those who want a denationalized "mono-culture" and those who seek a distinctive bouquet of national cultures. During the years following the Bolshevik Revolution, he maintains, Russia fell victim to a national nihilism: "In the 1920's," he recalls, "there took place a directed and forceful supplanting of traditional art by a new art which called itself revolutionary. It was indeed 'revolutionary' in much--provocatively alien and aggressive, not wanting to share power with the fruits of that land in which it had established itself. In the struggle with these fruits, it [the new art] was prepared to use dynamite in both the literal and figurative sense."[28]

The "revolutionary" idea underlying this new art was: "Blow up, destroy, wipe the old artistic forms off the face of the earch."[29] Its aim was to create a supra-national "mono-culture" which was "socialist in content" and only cautiously "national in form."

Clearly, for Rasputin, the term "new art" serves as a codeword for the Bolshevik Revolution itself, whose militant anti-Russian tendencies in the period 1917-1934 he abhors. In comments made at a conference in West Berlin in early 1987, Rasputin directly called for a rejection of the regime's "moribund ideology" of Marxism-Leninism.[30]

To return to the 1920's, Rasputin believes that "peasant Russia

was too large" at that time to be completely destroyed by the new ideology. Since the time of the 1920's, in his view, there has been an unrelenting struggle between a militant anti-national ideology and the remnants of a healthy national culture.

Rasputin has stood immovably against the processes of westernization de facto being promoted by Gorbachev, Aleksandr Yakovlev and their allies. "We are already," he has complained, "becoming accustomed to paradoxes, each of which should horrify us. In order to preserve the peace, we accumulate weapons capable of destroying the planet ten times over; in order to appear strong, we deprive ourselves of our real strength, polluting the water, air, the earth, receiving back foodstuffs which are contaminated with poison...; in order to become rich, we sell our national wealth; in order to cleanse ourselves, we spit on the past...And finally, in order to establish the people in glory and well-being, we import foreign models for them."[31]

The preeminent symbol of this inrush of Westernization has been rock music. "Neither the Volga," Rasputin has written, "nor [Lake] Sevan, nor the Aral Sea, nor [Lake] Baikal has been deemed worthy of one-tenth of the public attention which rock [music] has gathered in its defense."[32] The government, he contends, is benighted to seek to promote rock music on television and in the mass media.

In general, Rasputin opposes those who seek "to create in society an atmosphere in which any mention of traditions and roots would be decisively repudiated."[33] The importation of Western mass culture has led to a new kind of intoxication: "...instead of mass drunkenness, [we now have] mass entertainment..."[34] And, he asks: "What has happened to our culture? It is as if it has been given plastic surgery to replace beauty with ugliness..."[35] Vulgarity blares forth from the Soviet cinema and from television screens and is promoted in Soviet theaters. The pernicious cult of "we only live once" is everywhere proclaimed.

Not mindless mass culture is needed, Rasputin contends, but patriotism and a rootedness in the thousand-year traditions of the Russian people. During the 1920's, he recalls, the word patriot "was

practically considered a synonym of 'White Guard'," but once the Nazis began to swarm into the country in 1941, the term had to be revived. "If [patriotic] awareness exists," he declares, "a state is strong; if it does not exist, extreme misfortunes await that state."[36]

In extolling patriotism, Rasputin emphasizes that he is not a narrow-minded chauvinist. "...let each person," he proclaims, "take pride in the fact that he belongs to his people. It won't harm anyone. An Armenian in that he is an Armenian; an Estonian in that he is an Estonian; a Jew in that he is a Jew; a Buryat in that he is a Buryat. And let the Russian, too, join this assembly, this 'free and friendly family [of nations].' He, too, has accomplished services before world culture and civilization."[37]

In Rasputin's view, a "trans-national" culture cannot exist. Citing the opinion of the famous 19th century Slavophile writer, Ivan Kireevskiy, Rasputin maintains that Russia should assimilate "everything which is beautiful, noble, and Christian," whether it comes from Europe, Africa, or anywhere else.[38] But such foreign borrowings must be carefully assimilated, not hastily ingested.

Rather than headlong Westernization, Rasputin promotes indigenization. The traditional names of Russian cities should, he feels, be restored: Gorky should once again become Nizhni Novgorod, and Kalinin, Tver. Traditional Russian holidays like St. John's Eve and St. Dimitri's Saturday should likewise be brought back.[39] He also advocates issuing mass editions of the works of prerevolutionary Russian historians. "See how Mother Russia got stirred up from one end to the other," he has commented, "when a subscription to the works of [prerevolutionary historians] Solov'ev and Klyuchevskiy was announced. She was famished for her full history."[40]

A last element in Rasputin's thought which should be discussed is Christianity. Rasputin has fairly recently converted to Orthodox Christianity, the Russian national religion. (In the area of Eastern Siberia where he was raised, there were virtually no functioning Orthodox churches; they had been closed down in the twenties and

thirties by the regime.) The distinguished literary critic, Georges Nivat of the University of Geneva, has noted that: "He [Rasputin] came to Christianity through a quest for national feeling, out of despair over the moral destruction which he sensed about him..."[41] In his June, 1988 address on the occasion of the one thousandth anniversary of the baptism of Kievan Rus', Rasputin declared: "The choice made a thousand years ago by [Prince] Vladimir Svyatoslavovich had such enormous consequences for our homeland that we are unable fully to conceive of them today."[42]

Rasputin notes that five hundred years after the baptism of Rus', Russia had succeeded in freeing herself from the Tatar-Mongol yoke. Perhaps today, he speculates, a millennium after the baptism, something similarly "majestic and fateful" awaits her—an obvious allusion to the liberation of Russia from servitude to Marxism-Leninism.

Employing Dostoevsky's "Legend of the Grand Inquisitor" in the novel The Brothers Karamazov as a basis for reflection, Rasputin considers the consequences of Russia's "general rebellion" over the past century, of her purblind desire to "reconstruct" (he uses the word pereustroistvo, a transparent dig at the term perestroika) the world before effecting moral renewal. What Russia needs, he affirms, is not "computerization" but "humanization."

Waging "Civil War"

To rescue Russia--her environment, her past, her people, and her national religion—Rasputin has committed himself to the struggle against the dynamic general secretary and his followers. "Dmitri Donskoi," Rasputin recalls, "leading his troops out to battle at Kulikovo Field [in 1380], made a choice: victory or death. To retreat was impossible. Today is such a decisive time for our society."[43] Like the battle of 1380, today's clash appears on the surface to be an unequal one: "Our strength," he stated in 1987, "is that of a company going up against a division."[44] And speaking to an assembly in Moscow

in December, 1987, Rasputin expressed mock astonishment that the capital had not yet been "fully taken" by the opposition.[45]

The struggle with the Gorbachevites has been intense, fierce, and hand-to-hand. "The struggle which is taking place between [our] two cultures," Rasputin said in late 1987, "simply frightens me. Sometimes it seems that it will end in civil war."[46] On that occasion, he noted that, in Irkutsk, only three of the newly-formed informal organizations were being persecuted--the Society for the Defense of Lake Baikal, the local temperance group, and "Cathedral Folk" (soboryane), a society for the preservation of historical monuments. Rock groups, on the other hand, were being left alone. Why? Because "these three [Russian patriotic groups] are deemed dangerous, due to their anguish over the fate of Russia."

In late 1988 and early 1989, one began to sense a growing feeling of confidence on Rasputin's part that the strength of his side was now at least equal to that of the opposition. The battle will, of course, continue.

To conclude, I have attempted in this second section of my paper to convey the basic ideas of a pivotal contemporary Russian nationalist spokesman. Those familiar with Solzhenitsyn's writings will be struck by the similarity between Rasputin's thought and that of the 1970 Nobel prizewinner for literature. Whether we like it or not, such ideas are likely to continue percolating among ethnic Russians over the final decade of the present century.

NOTES

1. In Voprosy Filosofii, No. 9, 1988, p. 31.

2. See "The All-Russian Academy," Pravda, February 2, 1989, p. 6.

3. See O. Trubachev, "The Millenial Life of the People," Sovetskaya Rossiya, January 4, 1989, p. 3.

4. Metropolitan Filaret of Minsk and Belorussia, head of the Moscow Patriarchate's Department of External Ecclesiastical Affairs, has reported that 697 formerly closed Orthodox churches were permitted to resume operations during 1988, the year which marked the thousandth anniversary of the baptism of Kievan Rus'. (See "The Time of Glasnost Is Ripe," Argumenty i Fakty, No. 1, 1989, pp. 4-5) Konstantin Kharchev, chairman of the Council for Religious Affairs of the USSR Council of Ministers, provided a figure of

"more than 500" for the year 1988 in an interview published in December, 1988. (See "The Law and Conscience," Ogonyok, No. 50, 1988, p. 3) According to Kharchev, only 16 new Orthodox churches had been registered in 1987. I have written a lengthy article, entitled "Politics of Religion [under Gorbachev]," which will appear in a forthcoming issue of Problems of Communism.

5. For the program of the Christian Patriotic Union, see Veche (Munich), No. 32, 1988, pp. 209-214.

6. On this, see my articles "Soviet Cultural Politics," Problems of Communism, November-December, 1987, pp. 34-56, and "The Contemporary Russian Nationalist Spectrum," Radio Liberty Research Bulletin, special edition, December 19, 1988, pp. 1-10.

7. On this, see my article "The Contemporary Russian Nationalist Spectrum," pp. 3-4.

8. Alain Besancon, "Nationalism and Bolshevism in the USSR" in Robert Conquest, ed. The Last Empire, Stanford, CA, Hoover Institution Press, 1986, p. 11. Milovan Djilas has expressed similar views. See "Djilas on Gorbachev (II)," Encounter, November, 1988, p. 30.

9. For the text of Rasputin's address, see Literaturnaya Rossiya, October 28, 1988, pp. 2-4.

10. See "Old Myths, New Fears," Kommunist, No. 17, 1988, pp. 23-26, and Ogonyok, No. 52, 1988, pp. 13-15.

11. On this, see Krasnaya Zvezda, January 24, 1989, p. 4.

12. In Knizhnoe Obozrenie, No. 14, April 1, 1988, p. 8.

13. The New York Times, March 3, 1981, p. 13.

14. In Ogonyok, No. 13, 1987, p. 2.

15. In Znamya, No. 1, 1987, p. 222.

16. Ibid.

17. On this, see John B. Dunlop, "The Almost-Rehabilitation and Re-Anathematization of Aleksandr Solzhenitsyn," Working Paper Series, International Studies Program, Hoover Institution, Stanford, CA 94305-6010.

18. See the articles by Natalya Ivanova in Ogonyok, No. 36, 1988, p. 19, and by Poel Karp in Knizhnoe Obozrenie, No. 3, January 20, 1989, p. 6.

19. See Pravda, July 30, 1988, p. 3.

20. In Pravda, January 8, 1989, p. 3.

21. For the text of the letter, see Pravda, January 18, 1989, p. 6. In addition to Astafyev, the letter was signed by Russian nationalist activists Mikhail Alekseev, Vasily Belov, Sergei Bondarchuk, Sergei Vikulov, Pyotr Proskurin, and Rasputin.

22. Cited in Pravda, June 24, 1988, p. 4.

23. In Literaturnaya Gazeta, January 1, 1988, p. 10.

24. Ibid.

25. Ibid.

26. Cited in Svobodnoe Slovo Rusi (Mt. Vernon, NY), May-August, 1988, pp. 20-21. This is a transcript of a meeting of Russian nationalist writers held in Moscow on December 12, 1987.

27. Literaturnaya Gazeta, January 1, 1988, p. 10.

28. In Literaturnaya Rossiya, October 28, 1988, p. 3.

29. Ibid., p. 2.

30. Cited in Julia Wishnevsky, "Soviet Cultural Figures at the Berlin Academy of Arts," Radio Liberty Research Bulletin, RL 100/87, March 12, 1987, p. 7.

31. Literaturnaya Rossiya, October 28, 1988, p. 3.

32. Ibid.

33. Ibid., p. 4.

34. In Nash Sovremennik, No. 1, 1988, p. 171.

35. Literaturnaya Rossiya, October 28, 1988, p. 3.

36. In Pravda, June 24, 1988, p. 4.

37. Ibid.

38. Literaturnaya Rossiya, October 28, 1988, p. 3.

39. In Knizhnoe Obozrenie, No. 14, April 1, 1988, p. 8.

40. Ibid., p. 9.

41. Cited in Russkaya Mysl' (Paris), August 26, 1988, p. 11.

42. "The Speech of Writer Valentin Rasputin in Irkutsk in June, 1988," unpublished manuscript.

43. Literaturnaya Gazeta, January 1, 1988, p. 10.

44. Nash Sovremennik, No. 1, 1988, p. 171.

45. In Svobodnoe Slovo Rusi (Mt. Vernon, NY), May-August, 1988, p. 20.

46. Ibid., p. 22.

Senator MOYNIHAN. That was an absorbing thought, Dr. Dunlop, if indeed there is an end to ideology in the general sense, as we heard from our first panel and we have been hearing from you all. That poses a special difficulty for a 17th, 18th, and 19th century colonial empire that thereafter has no cohesive principle save imperialism.

Dr. DUNLOP. That is correct, senator.

Senator MOYNIHAN. That is going to be hard to do. Senator Biden has had to step out for a moment. I have some questions for you, Dr. Dunlop, and I would like to have everybody answer them and respond.

Senator Helms, our ranking minority member, has asked that I put to you several questions on his behalf. I will ask Dr. Dunlop, and then we will go right down. Could you cast some light on the

attitude of the various Russian nationalist movements to the question of the Ukraine and Ukrainian nationalist movement?

Dr. DUNLOP. Thank you, Senator. I would be happy to answer that.

I think all Russian nationalists of whatever persuasion are immensely concerned about the Ukraine and Byelorussia. They see the unity of the Eastern Slavs as being of critical political importance to the future of the Soviet Union.

There are different approaches to this problem. Liberal Russian nationalists, like Solzhenitsyn, for example, who has many like-minded followers in the Soviet Union, believe that the unity of the Eastern Slavs should be contingent upon the agreement of the Ukrainian and Byelorussian people to maintain that unity.

Senator MOYNIHAN. Would you help someone ignorant in this matter? The Eastern Slavs would be, as distinct, say, from the Slavs in Czechoslovakia?

Dr. DUNLOP. By Eastern Slavs I mean the Byelorussians, Ukrainians, and Russians. Solzhenitsyn and people who think like him believe that referendums should be conducted among the Eastern Slavs to determine what they really want. He hopes that they will agree to continue in some kind of federal arrangement with the Russians, but it is dependent upon the will of those people. A more conservative Russian nationalist——

Senator MOYNIHAN. And absent such an agreement, what would we have?

Dr. DUNLOP. Then you would have the RSFSR going off on its own. And Solzhenitsyn says, "Russia is big enough to make it." But it would, of course, be a scaled-down version of what we have today.

Senator MOYNIHAN. We can give some thought to that. We might even get something out of that.

Dr. DUNLOP. More conservative Russian nationalists, of whom there are many, are also concerned about this question, and they are beginning to do some missionary work among their Eastern Slav brethren. You will find people like Glazunov going to the Ukraine.

And to be precise, the conservative nationalists have not really articulated what they would do if, indeed, referendums were conducted and the other Eastern Slavs wished to break off.

Senator MOYNIHAN. That is another proposition.

Dr. DUNLOP. That is correct.

Senator MOYNIHAN. What does the rest of the panel think on this point? Professor Connor.

Dr. CONNOR. Well, it raises, clearly, the issue of the Russians living outside the RSFSR anyway; that is, living in the other 14 republics. And well, there is some 24 million, I believe, as of the 1979 census, 24 million outside, a figure that, obviously is larger than the total population of most countries at the present time. And they represent, clearly, a very, very strong force.

And these are the people, of course, that I think so far, the indications are, will be the principal lever by which the central apparatus will try to hold back some of the aspirations of the titular groups within these republics. That is, they are emphasizing very strongly that what you are asking for is fine and good, but we must

protect the minorities, as they are now called, within the various union republics.

And the Russians, clearly, because they are the most significant element, and because, in turn, they can also apply the most pressure through the commonality of great Russian nationhood upon the government, that this group, more than any other, is in the forefront of these organizations already forming in the republics, countering these popular fronts with with "all union," "international"—the name varies somewhat from republic to republic, "international" usually, however, is in the title—trying to say, we are not just doing this for the Russians, but we are doing it for all of the other nontitular peoples within the republics as well.

Senator MOYNIHAN. It is a remarkable thing that you say: groups forming. That has to be the most astonishingly significant break. I mean, groups form. There used to be one group and subdivisions thereof.

The correspondent for Izvestiya has had to leave, so I feel free to say this, although I want to be clear on the record that he is welcome any time. I do not have Dr. Lubin's experience on Russians populating the non-Russian republics, but I have my wife, who is an architectural historian and has traveled very extensively in that part of the world. My wife was once the tourist of the month in Tajikistan. It was a distinction that you can envy until you realize that apparently she was the only tourist.

One morning there was a rap at the door and she wondered what on earth it was going to be now. And she opened the door and a gentleman said, "You must come to the lobby." And she came to the lobby and there was a correspondent from the local Pravda, and there was a television camera. And they said "You are our tourist of the month."

But the hotel in which she was tourist of the month was filled with great Russians. And there was not a Tajik in the place.

Dr. LUBIN. Well, just partly responding to you and partly to Walker, I wanted to make just two other points. I was the only Westerner in Uzbekistan so I know how she must have felt. But I think when we talk about, first, Russians being in the key positions in the outlying republics, it is partly for political loyalty, and partly it is often for reasons of efficiency in some of these republics.

But it is important to make a distinction between those Russians sent down from Moscow and those who are actually the second, third, or even fourth generation already living in that republic.

Those who were born in the republic and live there often share local interests more than they do Moscow's.

Senator MOYNIHAN. Which is perfectly normal.

Dr. LUBIN. And then, the second point I would make when we are talking about Central Asia is that up until a couple of years ago we were seeing a net outmigration of Russians back into the RSFSR. They were leaving Soviet Central Asia in very large numbers.

Senator MOYNIHAN. If I could just say before I get into the next question. Senator Biden has had to leave, but I would like to pick up on your description of the Uzbeks fighting at the university. The first carefully recorded ethnic riots in New York City, and I

wanted to say this for Senator Biden's benefit, took place in the 1830's when the Croton Reservoir was being built.

And the Kerry men and the Mayo men just bashed each other endlessly every Friday, Saturday, and Sunday, all day long. And it was entirely intraethnic.

Senator Biden.

Senator BIDEN. Keep going.

Senator MOYNIHAN. Senator Helms had some questions.

Senator Helms asked Dr. Dunlop, but we will ask all of you: Do you feel that it is possible for the Russian nationalist movements eventually to work together with nationalist movements in the Baltic states and within the Soviet empire toward a liberation from the dictatorship of the Communist Party, which threatens all nationalities?

Dr. DUNLOP. It is a complex question, Senator.

Senator MOYNIHAN. Well, Senator Helms usually asks complex questions.

Dr. DUNLOP. Again, I think that one can find a number of issues on which Russians and Balts are agreed. One of them, for example, is protection of the environment, which you have already mentioned. There is strong, almost obsessive environmentalism in both the RSFSR and in the Baltic.

Senator MOYNIHAN. Can I just say we encountered that. This committee sent a small delegation to the Soviet Union 2 years ago. And the Soviets wanted to talk environment with us.

Dr. DUNLOP. So, my point is there are issues which can unite Russian nationalists and Balts. My feeling, though, is that among the Balts today in the popular fronts—and I do not mean the international fronts, I mean the popular fronts of the three Baltic republics—the desire for separation is so strong that I do not think it is possible or likely that they and the Russians under any kind of liberalized system would be able to work closely together.

I think the Balts want to be neutral states like the Scandinavian countries.

Senator MOYNIHAN. Well, that goes to Professor Horowitz' point about peoples at different levels of development. Have I got you there?

Dr. HOROWITZ. Yes, Senator. It does, indeed. I guess, since Senator Helms is my Senator, perhaps I am the appropriate person to say that we ought not to underplay the cement that binds, even tenuously, various ethnic and national groups together.

Even the decline of ideology may not undo a state like the Soviet Union. We have, after all, even in the West, multinational states with very thin ideologies, if ideologies at all. And I can name two that we would instantly recognize in this category: Great Britain is one.

And the referendums in Scotland and Wales suggested that there was more cement tying Scotland and Wales to England than one might have guessed in the abstract.

Canada is another, of course. It is not clear that the Canadians have entirely weathered their storms, but it is not clear either that Canada, which might have been thought to have rather tenuous bonds, particularly between Angiophones and Francophones is going to——

Senator MOYNIHAN. If I could just interject. When the Canadians set up their bicultural and bilingual commission, they set out to find out how can the French-speaking and English-speaking get together. Did they not find they had all these people that spoke Japanese, and Russian, and Ukrainian, and Chinese?

Dr. HOROWITZ. Ukrainian particularly, of course. And they ended up with bilingualism and multiculturism, you remember.

Senator MOYNIHAN. So, they found it was not a——

Dr. HOROWITZ. It was at least a three-party game. The position of the Italians in Montreal was a very interesting one, of course, because they were largely English speakers and recent immigrants, and some Francophones were particularly keen to make them French speakers, even by compulsion if necessary.

But there were many such third groups implicated, large numbers of Ukrainians in the prairies.

Senator MOYNIHAN. So, given enough nationalities, maybe the best option is to keep the place together?

Dr. HOROWITZ. I think there is something to be said for viewing the Soviet Union in terms rather similar to those that might be applied to India: a large multiethnic or multinational state where there may not be any single overriding cleavage.

Once in a while such a cleavage manifests itself in India, as between north and south, for example, as it does in the Soviet Union between Russians and non-Russians.

But, for the most part, you have got a lot of conflicts in a lot of different compartments. And Dr. Lubin's remark about the Uzbek versus Uzbek riot sounds a lot like, let us say, the Telengana dispute in Andhra Pradesh in India, which was a very serious one, entirely between people who spoke the Telugu language, but threatened to break the state apart.

So, I do not think that ethnic problems per se necessarily mean that we are going to see a break up of a very large state like that. And there is some considerable advantage in having those problems in separate, dispersed compartments.

If I could add just a word based on what Professor Connor said about the Leninist idea of fusion, he was referring to the fusion of nationalities into an overriding Soviet nationality that would essentially forget preexisting ethnic identities.

Now, it is true that that idea has given rise to a good bit of coercion and to some policies that are inimical to the interests of the various ethnic groups in the Soviet Union, but there is an empirical question lurking here that I am not sure we have the answer to yet.

I remember Professor Connor and I attended a seminar at the Lehrman Institute in New York 5 or 6 years ago at which the notion was advanced that in the Soviet Union, competing with the identities of of Ukrainian and Uzbek and Russian and Estonian and so on, is an identity described in terms of Soviet.

That is, one can be Ukrainian and Soviet; one can be Uzbek and Soviet as one can be, say, Italian-American. And if that is true, that is a very considerable dampening force on the ultimate expression of ethnic separatist impulses in the Soviet Union.

There have been surveys in some Western countries, for example, like Switzerland, that suggest that people see themselves as

both French-speaking and Swiss; as German-speaking and Swiss. And of course Switzerland is well known as a multiethnic country that has done very well in managing its ethnic tensions.

Now the Soviet Union has some problems that the Swiss do not have, and the Swiss have some advantages that the Soviets do not have. But it would be a very interesting empirical question to know how many people in the Soviet Union, and in which republics, of what ethnic memberships, identify themselves either as Soviet or as say, Uzbek and Soviet, or hyphenated, in other words, to put it in terms that we would readily understand in this country.

Senator MOYNIHAN. Dr. Connor.

Dr. CONNOR. Simply to follow up on what Don was saying, we do indeed have a lot of comparative data, particularly dealing with the Western democracies, of multinational states, where we do get into their attitudes. And what we have found, quite consistently in such societies is that the state does have a high reservoir of goodwill among the nondominant peoples. For example, when you ask the Quebecois, "What do you feel the greatest affection and greatest emotion toward, Canada or Quebec?" It is Quebec hands down.

But on the other hand, the polls also document that Canada still enjoys a great deal of affection on their part. This accounts for the fact that when we have a chance to ask about separatist sentiment, we usually find that only a relatively small minority actually want separatism.

In the case of Quebec, even though the Party Quebecois, a separatist party, did, in one of the provincial elections, actually win a majority of the French vote, not of the total vote, but the French Quebec vote, several polls indicated that the actual proportion who favored separatism has never extended above 18 percent.

Similarly, the Basque figure, for those favoring separatism never went over 32 percent.

However, such findings do not mean that national minorities living in national homelands are satisfied with their present situation. They may not aspire to separatism, but they do want a very meaningful degree of autonomy.

Now autonomy, unfortunately, is a most ambiguous term, it can mean everything from a bit of home rule, all the way to everything short of demanding that you have the right to send ambassadors around the world.

But, nonetheless, the fact is that polls, and election data, as well, indicate that groups are prepared to settle for something less than separatism unless they see these two loyalties—loyalty to the state and loyalty to their ethnic group—as in irreconcilable conflict.

Senator MOYNIHAN. I can think, if I may, of a remark by a Swiss person whom I once asked, When did the Swiss finally figure out how to work this out? And he said, "We got to the point when we realized our problems were insoluble."

Senator Biden.

Dr. CONNOR. If I could just add one sentence, Senator. So, really the question for the Soviet leadership might be: Are they really prepared to grant meaningful autonomy to these peoples, sufficient autonomy so that at least a majority of each of these titular peoples would be prepared to accept continued membership in the Soviet Union?

Senator MOYNIHAN. Senator.

Senator BIDEN. Thank you.

I apologize for being in and out, first, to vote, and then several important phone calls I had to take. And I apologize because I have heard very little of your testimony. But I did hear part of yours, Dr. Lubin.

And if I am correct in my recollection, you indicated that Gorbachev has, in effect, cracked down on religious expression in Central Asia, as opposed to what was essentially more of a laissez faire attitude that existed prior to his coming to power.

Yet we hear and read that he seems to have been liberalizing the Russian Orthodox Church.

First of all, is that true? And second, if it is true, what does it portend? Why is it occurring?

Dr. LUBIN. Yes, I pointed out that initially, there was a what was perceived in large part as a crackdown. In the last couple of years or so, there has been some easing up. They have opened a few more mosques, they are extending the amount of Islamic education; that is allowed to take place. There has been an easing up recently.

But I think you hit on something important, too. It was not overlooked on the part of local Central Asians, that at the same time that they perceived a crackdown in their own republics, Soviet authorities were in fact, at time of the millennium, being much kinder toward the Orthodox Church.

What that meant, so far as I read it, was a heightening, in a sense, of Islamic identity down in Central Asia, both in response to the crackdown, but also with reference to the other religions as well.

Senator BIDEN. That is helpful, not only what it means in terms of its impact, but do you have a sense of what it means in terms of what Gorbachev is about?

Dr. Dunlop had indicated earlier—as I, again, only caught part of your testimony, and I apologize. This is a dangerous thing to do; it is like after a speech when people come up to you in stages, and someone asks you a question that takes you 2 or 3 minutes to answer. In the meantime, 10 other people have joined the conversation, and it is the worst thing in the world to do.

You should never try to answer a question that way because you are always going to be misunderstood or misquoted. And maybe I misunderstood you since I came in in the middle. But, as I understood it, you said there is a rising Russian ethnic concern. This, quite frankly, was of great interest and some news to me, to the degree to which you set it out.

And if it is true that there has been a greater liberalization toward the Russian Orthodox Church, as opposed to Islam, does that contradict what you have indicated—in other words, that Gorbachev is not being sympathetic to, and/or the creature of the Russian majority, but, is nonetheless, identifiable as such?

Dr. DUNLOP. Thank you, Senator. I have just written an 88-page essay on this, which will be appearing in "Problems of Communism" shortly. But to summarize very quickly. Gorbachev, who is an atheist——

Senator BIDEN. I want to make it clear, this is not a set up.

Dr. DUNLOP. Gorbachev, who is a devout atheist, had very good political reasons to make overtures to the Russian Orthodox Church, particularly during last year, the year of the celebration of the 1,000th anniversary of the baptism of Kievan Russ.

Just to name several reasons, as I have already mentioned, he desperately wanted to split the ranks of Russian nationalists. And one way to do this was to try and co-opt religious believers among them and break them off from their less religious brethren.

Also Gorbachev was aware that sympathy for religion among the intelligentsia, which is his most vital constituency, had been growing significantly since the 1960's. Khrushchev was able to persecute the church because most Soviet intellectuals at the time were indifferent to the fate of religion. That has dramatically changed now. We have a lot of evidence to that effect.

The intelligentsia, basically, would not stand for another assault on the Russian Orthodox Church. So, that was another major reason.

Also, Gorbachev was interested in enlisting the support of Soviet youth. Soviet youth also are either sympathetic to or indifferent to religion, but they are not hostile to it. So, there were a number of cogent political reasons inducing Gorbachev to change the traditional tack of the regime toward the church.

I should point out, however, that in the No. 4, 1988 issue of Communist, which is the party's theoretical journal, it is stated explicitly that the aim of the regime remains to eradicate all religion from the Soviet land.

Senator BIDEN. Why, if there were cogent political reasons existing for him to attempt to co-opt part of a movement that was not particularly warm to him? Why are there not equally cogent political reasons, Dr. Lubin, for him to attempt to co-opt the Islamic faith or those with whom I assume, as you explained it, there is a real split.

It is not everyone who could be characterized as a Muslim feels equally strongly about Islam and there is a cross-fertilization in Central Asia that goes beyond what most people in this country at least I think exists. I would ask you to comment, Dr. Dunlop also.

Is there an equally cogent political reason? Is he missing it or does it not exist?

Dr. LUBIN. No. They are the same reasons or similar reasons and they have certainly been co-opting Islam over time. For several decades the Muslim Religious Board for Central Asia and Kazakhstan has been "promoting religious affairs." They are constantly having conferences where they are bringing in foreign Muslims from all over the world to meet and talk about Islamic affairs. Soviet leaders have used their Muslim populations in foreign policy, whether to forge ties in Afghanistan or as ambassadors to other countries. So, that balance of in part co-opting I do not really think has changed. The question is more degree and purpose.

Senator BIDEN. I am interested in the degree of the crackdown and the degree to which it has eased up. What you are saying is now, at this moment, in Central Asia——

Dr. LUBIN. Despite some expansion of officially sanctioned religious activity, it is in many ways similar to what it was before Gorbachev even came into power.

Senator BIDEN. That is another reason why I should have heard all of what you had to say. I would have saved you a lot of time and I apologize.

Dr. Horowitz, I am told—because unfortunately I did not hear any of what you had to say—you indicated that there is a potential changing attitude in the Baltic states as the realization grows that the hidden and direct subsidies from Moscow would vanish if their goals for independence were achieved. The Baltic nations fear they could not survive without those subsidies, hidden or otherwise.

I am not sure that is correct, but I am sure that Gorbachev's economic guru indicated recently in a visit to the United States in an argument similar to the one that I just stated that I assume to be what you said—that the zeal for independence has diminished somewhat because the Baltic states have come to the realization they couldn't survive economically without Moscow's help.

So, first, is that what you had indicated? And second, if you did not, how would you respond to what I understand to be the statement made by a leading Soviet economist in the United States not long ago?

Dr. HOROWITZ. Well, what I said, Senator, actually was rather more complicated than that. My remarks about the Baltic states were embedded in a comparative framework of how to think about problems like the Estonian problem, for example. And I characterized Estonia as being an economically advanced region with people whose per capita income and education was above the norm.

Indeed, Estonia is, on a per capita basis, the wealthiest of the republics. Such regions, I said, not referring now to the Soviet Union but to comparative experience elsewhere, such regions typically begin by thinking that the center is taking resources away from them and not giving them back in full measure.

And so if only they had independence they could take the resources, keep them and apply them to their own use, particularly because such regions are——

Senator BIDEN. Somewhat like New York City?

Dr. HOROWITZ. Yes. Typically such regions are magnets for in-migrants from other areas, and Estonia is such a magnet. So, there is another reason independence looks attractive. You can either expel or control those ethnic strangers or worse, in some cases, if you have independence.

But then as such movements develop they typically begin to make finer calculations about the balance sheet, and it is often the case, especially where it is manufacturing that is the source of prosperity of that region, as in the Basque country of Spain, for instance, it is typically the case that the balance sheet is different from the way it looks at the beginning and that there are hidden subsidies.

Senator BIDEN. Is there such a realization of that at this point in Estonia, for example?

Dr. HOROWITZ. What I was going to say is I am not all sure that the ultimate balance sheet has been drawn up in Estonia or that it will come out that way. There are some important differences in Estonia. For one thing, it is not manufacturing so much as it is mineral extraction that is the basis of prosperity and that may make some different calculations.

In manufacturing you may be producing goods for a protected domestic market that are not competitive on the world markets. The opposite may be the case with extractive industries. You may get a higher price on world markets, so that may be an incentive to separatism.

Senator BIDEN. I know I am trespassing on the Chair's time here, but it is fair to say, then, that we do not know and apparently the Estonians do not know where that balance sheet comes out. Is that what you are saying?

Dr. HOROWITZ. (*a*) I am clear that I do not know. (*b*) I am less clear on what the Estonians do and do not know at this stage of the game. Them seem to be markedly more enthusiastic for separatism than such groups typically are toward the end of a course like the one that we are witnessing now.

Senator BIDEN. Professor Connor, did you want to speak to that?

Dr. CONNOR. We do know that for some years the Communist parties of the Baltic republics were not after more investment. They were after less investment because more investment meant also greater in-migration of non-indigenous peoples, particularly Russians.

Moreover, one of the ironies in the case of the Soviet Union is that Leninist theory would hold that where you would be most apt to find ethnic discontent would be on the part of peoples who were poorer, but when you think about it the five republic peoples who have given the Soviets the most problems in terms of their nationalism have been those peoples, all of whom have a higher per capita income than the Russians; namely, the Baltic peoples, the Armenians and the Georgians.

Senator BIDEN. That is not so unusual, is it, historically?

Dr. CONNOR. No, no. Donald mentioned the Basques. He could have mentioned the Catalans, or, in the case of Yugoslavia, the Slovenes and the Croats, both of whom are wealthier than the Serbs.

Senator BIDEN. Dr. Lubin, did you want to make a comment?

Dr. LUBIN. I would just add by contrast the Central Asians know they get about 5 billion rubles each year in subsidies from Moscow possibly coming from these republics, so that their gripe is they want more control over how it is spent. But it is a real tie to Moscow.

Senator BIDEN. There are many, many questions I would like to ask you, but I would like to ask one and it may be beyond the purview of what you have spoken to today but if you have an opinion I would appreciate it and, if not, I understand.

There is a debate that is going on now among our various allies in the councils of NATO—military, political, and economic—as to why Gorbachev is taking the initiatives that he is. These range from the withdrawal of a significant number of troops to an apparent commitment to withdraw the divisions that are most threatening to the West and provide the rationale for the configuration of our present military posture. Further discussions focus on why he is apparently attempting to impact on the statist attitudes of most East European regimes and why in some states like Hungary and Poland there is not a reluctance but a welcoming of that attitude and why among the more severe regimes, from Romania to the GDR, there is a resistance.

And one of the things that I find most troubling when I deal with my counterparts in the various European parliaments whether it be President Mitterand or Margaret Thatcher, is this debate is going on. And there are a number of explanations that unfortunately in my view, lead us to the same conclusion about what our policy should be. They lead different people to justify what are very different positions as to how we should be reacting, responding, and/or initiating.

Now having given that brief background, let me go one step further. Those who argue, as some of you heard in the first panel today and some within the administration and in Congress argue that we really should stand back and watch things unravel. They usually say the reason why Gorbachev is in the position he is now—and I realize there is a confluence of all these ideas; they are not easily separable—is basically that NATO has worked and the policy of the Reagan administration of the last 8 years has worked.

We are seeing the Soviets having to bend to respond and change as a consequence of a consistent U.S. and Western European policy through the vehicle of NATO.

There is a second view that you hear quite frequently, and particularly in Europe that I hear, that Gorbachev is moving into the category of being the leader of a Third World nation economically. He recognizes that regardless of what the United States has or has not been doing and regardless of what the West has or has not been doing the last 40 years, he has to make drastic changes and the drastic changes relate to reductions in his military force structure. And he knows he can no longer carry Eastern Europe, because the Soviets have been subsidizing the region in oil and in other areas. Therefore he has to change, and he would have arrived at this conclusion at any rate short of open war or a very, very heated cold war.

There are other explanations I will not go into that you have heard a hundred times. I would like to ask each of you what your instinct is as to why Gorbachev is making the moves he is making, particularly as they affect Eastern Europe—that is, troop reductions in Warsaw Pact countries, and the direct encouragement, it appears to be, in particular countries to attempt a different economic approach than most of them have.

We will start with you, Dr. Dunlop, and work your way down, and I will get out of your hair.

Dr. DUNLOP. Thank you, Senator.

Senator BIDEN. By the way, I would like a copy of your 88-page article. I am serious.

Dr. DUNLOP. I will send one to you. No problem.

Senator BIDEN. I would appreciate it.

Dr. DUNLOP. Well, I find myself quite clear in my own mind—if we are just talking about Gorbachev rather than other people in the leadership—as to why he is doing what he is doing. I may be wrong, but at least I have a clear conception.

The reason is, first of all——

Senator BIDEN. Just like a Texan. You do not know much about art, but you know what you like.

Dr. DUNLOP. First of all, all of us are aware that the Soviet Union is facing a severe economic crisis. I am not sure we are even

aware of the ramifications of that crisis. It may be worse than we think. There is food rationing in many areas of the Soviet Union.

Furthermore, the Soviet Union has been lagging behind in the computer revolution. As a farsighted leader, as one who looks to the future and the long-term health of the Soviet Union—because he is a Soviet patriot—Gorbachev understands that in order for the Soviet Union to become strong in the first decade of the next century she has to take some strategic steps backward at this point.

Detente with the West is absolutely necessary to the Soviet Union as Gorbachev sees it, and he is therefore pushing ahead with that, and he is using what leverage he has with Eastern European regimes to induce them to adopt similar policies.

My own belief is that Gorbachev hopes that if this gambit works, then sometime early in the next century, perhaps in 15 years, the correlation of forces could change and things might be more advantageous for the U.S.S.R. But right now he has no choice. He is a bold man, a courageous man, an intelligent man, and so he is going ahead with this.

So, to put it briefly that is how I see his motivation.

Senator MOYNIHAN. May I just say that on the two explanations that Senator Biden offered, you would come down on the second?

Dr. DUNLOP. Right.

Senator MOYNIHAN. At 1:30 we are required to give up the hall, as it were, because there is a 2 o'clock meeting on another matter.

Dr. DUNLOP. As for what the United States should be doing—and I will be very brief—we cannot micromanage or fine tune what is going on in the Soviet Union. It would be insufferable arrogance for us to try. On the other hand, I think we should use what leverage we have to encourage political pluralism and national and religious rights. I think foreign broadcasting is the principal way in which we can achieve that end.

Dr. LUBIN. I agree with John, so if we are wrong we will both be wrong together. But I would underscore that when we are talking about steps backward that the Soviets might be taking, those are still very cautious and very sober assessments that they are making, whether it is with regard to their troop withdrawals or to their economic relations with Eastern Europe or the rest of the world.

And that may be the biggest implication for us is: that rather than trying to base our policy so much on Gorbachev's motivations, we try to better assess what we want, what are our interests.

Senator BIDEN. Good idea, Doctor. Good idea.

Senator MOYNIHAN. I think you just got a response from the chairman of the Judiciary Committee. If you want to be a judge someday, that was not a bad move.

Senator BIDEN. Maybe even Ambassador.

Dr. CONNOR. I would agree with everything that has been said. I would lean not so much toward the use of the word economic but rather the technological gap which clearly is one, whether they are talking ultimately in terms of——

Senator MOYNIHAN. Walker, that technological gap goes to the nature of the regime also. An information-rich society is not one that is compatible with a society where information is the monopoly of a party. So, it is not just technology; it is ideology.

Dr. CONNOR. Indeed. But again, whether we are talking military capability or whether we are talking about long-range economic growth, the key to Soviet fears is a technology gap. Gorbachev has stated and restated this to people who, in some cases, who did not want to hear it, that indeed the Soviet Union is losing the technology race.

Senator BIDEN. It is economic in the sense, though, that they have to have the currency, the hard currency.

Dr. CONNOR. Absolutely. But I am simply talking about the ultimate driving force.

May I add a very small point concerning the likelihood that Gorbachev feels that the Soviet Union can no longer carry Eastern Europe. I do not think it is that. I think it is more likely that he simply feels Moscow cannot depend upon it, and in such case it is no longer worth the candle. It has become more a liability than an asset. At least since the Budapest events of 1956, Moscow has had good reason to question the degree to which the armed forces of the East European countries would prove responsive to Soviet directives in a crisis situation. More recently, political developments in the Eastern European countries have proven increasingly resistant to external influence.

Dr. HOROWITZ. I would agree with that. I think the Soviets have had a number of close calls in Eastern Europe and most recently with the Solidarity movement in Poland. I think they understand perfectly well what the potential is for disintegration of Soviet influence in Eastern Europe.

I think they have also learned that at the present moment gains internationally are costly and potentially dangerous, and in this sense NATO works, I suppose you could say.

But on top of all of those factors I think there is a personality factor—that is to say I see Gorbachev as a modernizer, a reformer in the mold of Attaturk, somebody who has got big ideas and wants to make a big impact. Whether he is strategically as subtle as Attaturk or other such reformers certainly remains to be seen.

But I think here we are seeing a personality factor at work in a very large sense, at least the largest personality factor in Soviet politics since Stalin's personality impact.

Senator BIDEN. I realize we are closing down. I would like to ask permission and the sufferance of our panel. I would like to submit two questions to you for response in writing. I do not want to make a lot of work for you. One relates to a proposition made by one of your colleagues, Professor Hough has about Western culture and looking West.

And the other relates to the point you made, Professor Connor, about if in fact they are losing control or cannot control and I realize you are looking at a crystal ball, but that is part of what I hope you will do for us—what do you think Gorbachev sees Eastern Europe looking like 15 years from now?

At any rate, thank you very, very much. I appreciate it.

Senator MOYNIHAN. Thank you, Mr. Chairman. I want to thank our panel for extraordinarily luminous responses. Dr. Dunlop, there are still three questions on Senator Helms' list which I will give you. I thank our staff, who have put together this second of

what we think to be a set of hearings of which there is no counterpart in the last generation in this committee.

And on the stern injunction to see that the next ambassador to West Germany——

Senator BIDEN. Vernon Walters is ambassador to everywhere.

Senator MOYNIHAN [continuing]. Be heard at 2 o'clock and proceed, I am going to have to close down, with great appreciation to, not least, our indefatigable stenographer.

[Whereupon, at 1:24 p.m., the committee adjourned, to reconvene at 1 p.m., April 19, 1989.]

HEARING #3
SOVIET FOREIGN POLICY

WEDNESDAY, APRIL 19, 1989

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met, pursuant to notice, at 1 p.m., in room SD-419, Dirksen Senate Office Building, Hon. Claiborne Pell (chairman of the committee) presiding.

Present: Senators Pell, Biden, Kerry, Moynihan, Helms, and Pressler.

The CHAIRMAN. The Committee on Foreign Relations will come to order.

We are continuing a series of hearings, this is the third one, on the United States-Soviet relationship. And at the first hearing, 2 weeks ago, we heard from Ambassador Kennan, with the spectacular result at the end of the hearing, that everybody in the room, including the stenographer, got up and applauded.

And it is very interesting, the last time that occurred was in 1966, when the speaker was George Kennan. Nobody else has done that, and he has done it twice in 25 years.

Today, our committee will receive testimony from another panel of experts who will focus on Soviet foreign policy in the Gorbachev era.

Our panel consists of Prof. Arnold Horelick of the Rand Corp., who is director of the UCLA Center for the Study of Soviet International Behavior; former Ambassador David Jordan, professor and former chairman of the UVA Department of Government and Foreign Affairs; Dr. Michael Mandelbaum, who is director of the Project on East-West Relations and Senior Fellow at the Council on Foreign Relations, of which I am glad to be a member, and who also has an article in the current issue of Foreign Affairs entitled, "Ending the Cold War"; and Dr. Richard Staar, former Ambassador to the MBFR talks, now coordinator of the International Studies Program at the Hoover Institution.

I welcome the panel, let us proceed in alphabetical order, Professor Horelick.

STATEMENT OF ARNOLD L. HORELICK, DIRECTOR, RAND/UCLA CENTER FOR THE STUDY OF SOVIET INTERNATIONAL BEHAVIOR

Mr. HORELICK. Thank you, Mr. Chairman and members of the committee.

I would like to begin by making a few comments about——

The CHAIRMAN. I would interrupt. I think you all have been put on notice to try to limit your oral testimony to a maximum of 10 minutes, but you can have as long as you like inserted in the record.

Mr. HORELICK. OK.

I would like to make a few comments about change in the Soviet Union and United States strategy for managing relations with the U.S.S.R. in this period of change. There is a lot of uncertainty and debate about the changes now taking place in the Soviet Union. The uncertainty is not whether Gorbachev intends to change the Soviet Union radically, but about the course and outcome of the process of change that he has unleashed.

Will Gorbachev survive politically? If not, who and what would replace him? If he does survive, will circumstances compel him to retreat? Or will he persist, and perhaps become still more radicalized? And over the long run, what kind of Soviet Union will emerge from this stormy period of its history?

A new policy debate now seems to be shaping up over how the United States and the West, generally, should respond to the Soviet Union in these circumstances.

The debate is between those who choose to focus on the opportunities for major improvements in East-West relations, which they see in extrapolating current Soviet trends, as against those who are preoccupied chiefly with the challenges to the West posed by "Gorbomania" and by the lure of what they regard as uncertain promises of change, rather than irreversible accomplishments.

The first group, I think, is concerned that unduly pessimistic assumptions and an excessively cautious, play-it-safe approach, are going to cause us to miss possibly fleeting opportunities for real breakthroughs, maybe even inadvertently causing us to obstruct positive change in the Soviet Union.

The second group is concerned that unwarranted optimism about these Soviet trends could cause a premature weakening of Western security arrangements that have served us well against a distinctly uncooperative Soviet Union for the last 40 years.

Some worry about missing the Soviet boat, others worry about rocking the Western boat.

Now, how substantial have the changes in Soviet foreign and domestic policy under Gorbachev been, and what kinds of United States responses would be appropriate?

I think any analysis of Soviet foreign policy under Gorbachev has to begin with the domestic predicament of the U.S.S.R. and the program of perestroika designed to rescue it.

Gorbachev has said repeatedly, and I think on this score we have no reason to doubt him, that Soviet foreign policy now has to be subordinated to the priority demands of restructuring the failing Soviet economy and ailing Soviet society.

The task of Soviet foreign policy, according to Gorbachev, is to create favorable conditions for perestroika. This means dampening competitive pressures, especially military ones, in high-technology areas of comparative U.S. advantage. It means reducing the costs of Third World adventures. And it means a generally more conciliatory posture toward the West in order to encourage beneficial trade and technology transfer.

If that were all that there was to it, then it would be hard to argue that the Soviet leaders were doing much more than looking for a classic peredyshka, a breather, or a temporary pause, in which case, when and if the Soviet Union's domestic fortunes revived, it would be back to foreign and military policy business as usual.

But a lot more than that is clearly involved. Gorbachev, Shevardnadze, and others like them, have evidently concluded that pursuit of the Soviet Union's old external agenda was not only imposing an unacceptable strain on the country's resources, they also appear to have made a fresh assessment of the costs and benefits, the military and political payoffs, that have resulted from the enormous investments of their predecessors, and they appear to have concluded that the benefits were incommensurate with the costs, and even counterproductive.

The changes in Soviet foreign and security policy, which are said to be the product of "new thinking," have been most striking in arms control and in the Third World.

In arms control, as you know, these changes have included a series of major concessions to Western positions in START and INF; a major shift on verification; announcement of major unilateral, conventional arms reductions; followed by a first-phase opening proposal in the CFE negotiation that is much closer to Western positions than it was earlier anticipated it would be.

In the Third World, Moscow has taken steps to terminate Soviet and client military interventions in a number of countries, obviously, most dramatically in Afghanistan.

On the whole, Gorbachev's foreign policy toward the West has been marked generally by a series of conciliatory overtures and by restrained international behavior.

Now, what kind of response is warranted by these changes? And how should we deal with the challenges and uncertainties without missing the opportunities?

In my view, a strategy of what might be called step-by-step engagement is the most appropriate one for the circumstances. It is a strategy that distinguishes between those opportunities for major improvements that have been made ripe by Soviet changes that have already occurred and those potential opportunities that might emerge only if there is further, deeper, more institutionalized, and less readily reversible Soviet change.

Now, it is true, of course, that we have "engaged" the Soviet Union before; we did so on a broad front during the detente years, but now there are unusually favorable circumstances for pursuing longstanding Western interests on the traditional United States-Soviet agenda—that is, controlling and reducing the risks and costs of our ongoing competition.

Unlike during the detente period, global trends have clearly been running sharply against the Soviets since the late 1970's, and they know it. And whatever Gorbachev's long-term policy plans or intentions may be, the current circumstances of the Soviet Union constrain the Soviet leadership in ways that make it less inclined to fish in troubled waters abroad and more open to agreements and arrangements to ease competitive pressures.

So, it seems to me that where longstanding Western interests in managing the East-West relationship more safely, more reliably, and at lower costs, intersect with current Soviet interests in providing a congenial international environment for perestroika, the case for engagement is compelling and unambiguous.

This means, for example, moving ahead to complete a START-like agreement that would keep the nuclear arms control regime from unraveling, and, if we make sensible decisions on modernization, could further reduce remaining first-strike instabilities.

It means moving smartly to explore the common ground that we have surprisingly found with the Soviet Union in the conventional forces negotiation. It means continuing to cooperate in facilitating the disengagement of the Soviets or their clients from regional conflicts, and exploring the possibilities of cooperation in new areas.

But in his more millennialist pronouncements, Gorbachev has also invoked the image, not just of substantially improved, but of fundamentally transformed United States-Soviet and East-West relations. This is an image of relations in which competition is not only moderated and regulated, but essentially supplanted by a regime of comprehensive cooperation in an interdependent world.

This would imply a genuine paradigm shift in East-West relations. It would entail very significant changes in the framework of international and alliance arrangements that has evolved since World War II, including far-reaching changes in Western security structures and strategies.

So, to engage the Soviet Union politically and diplomatically on this level is a much more complex matter. We have to be careful that anticipatory Western security restructuring does not outpace the profound and permanent structural changes that would be required on the Soviet side.

On this longer term, and thus far, still rather nebulous agenda, we need to begin a dialog with our allies and with the Soviets. But here, it seems to me, we should move cautiously and step-by-step.

In particular, we need to begin thinking through what kinds of fundamental changes in the Soviet Union we would need to see in order to have confidence that the Soviet Union had become a suitable partner for a fundamentally more cooperative and mutually trusting relationship.

We need to ask ourselves what we would regard as persuasive evidence that such changes had actually taken place in the Soviet Union.

And finally, we have to begin asking ourselves what the West might be prepared to offer in return.

I can elaborate on some of this later if you would like, but, for example, very briefly, it seems to me that we would need to see effective, institutionalized, domestic political constraints on the external behavior of Soviet leaders, so that Soviet self-restraint should reflect more than the perhaps temporary choice of an unusual leader.

We would need to see the termination of the heretofore unchallenged priority enjoyed by the Soviet military in claims on the human and material resources of the Soviet Union, and we would need to see the evolution of the socialist states of Eastern Europe toward greater self-determination, so that their territories and

their resources would no longer be so readily at the disposal of the Soviet Union for potentially hostile purposes.

So let me sum up. The changes that have already occurred in the Soviet Union justify vigorous and expeditious United States engagement with the Soviets in joint efforts to reduce further the costs and risks of managing the competitive aspects of our relationship that are still dominant.

But a fundamental reordering of the relationship requires much more far-reaching and institutionalized changes. We have to be prepared to monitor these, to explore them with the Soviets and with our allies, and then see if the changing conditions of the Soviet Union and Eastern Europe warrant this more fundamental reordering of East-West security relations.

[The prepared statement of Mr. Horelick follows:]

PREPARED STATEMENT OF MR. HORELICK

I would like to begin by making a few comments about change in the Soviet Union and United States strategy for managing United States-Soviet relations in this period of change.

There is a great deal of uncertainty and debate about the changes now taking place in the Soviet Union. The uncertainty is not whether Gorbachev means to change the Soviet Union radically, but about the course and outcome of the process of change he has unleashed. Will Gorbachev survive politically? If not, who and what would replace him? If he does survive, will circumstances compel him to retreat, or will he persist, perhaps become still more radicalized? Over the long run, what kind of Soviet Union will emerge from this stormy period of its history?

A new policy debate is emerging over how the United States and the West generally should respond in these circumstances. The debate is between those who choose to focus on the opportunities for major improvements in East-West relations which they see in the extrapolation of current Soviet trends; versus those who are preoccupied chiefly with the challenges to the West posed by "Gorbomania" and by the lure of what they regard as uncertain promises of change rather than irreversible accomplishments.

The first group is concerned that unduly pessimistic assumptions and an excessively cautious "play-it-safe" approach will cause us to miss possibly fleeting opportunities for real breakthroughs, perhaps even inadvertently obstructing positive change in the U.S.S.R.; the second group is concerned that unwarranted optimism about these Soviet trends could cause premature weakening of Western security arrangements that have served us well against an uncooperative Soviet Union in the past. Some worry most about missing the Soviet boat; others about rocking the Western boat.

How substantial have the changes in Soviet foreign and military policies under Gorbachev been and what kinds of United States responses would be appropriate?

Any analysis of Soviet foreign policy under Gorbachev has to begin with the internal predicament of the U.S.S.R. and the program of perestroika designed to rescue it. Gorbachev has said repeatedly—and there is no reason to doubt him on this score—that Soviet foreign policy must now be subordinated to the priority demands of restructuring the failing Soviet economy and ailing Soviet society. The task of Soviet foreign policy, according to Gorbachev, is to create favorable conditions for perestroika. This means dampening competitive pressures, particularly military ones in high-technology areas of comparative American advantage; it means reducing the costs of Third World adventures; and it means a generally more conciliatory posture toward the Western world to encourage beneficial trade and technology transfer.

If that were all there was to it, then it would be hard to argue that the Soviet leaders were doing more than looking for a classic peredyshka, a "breather," or temporary pause, in which case, when and if the U.S.S.R.'s domestic fortunes revived, it would be back to foreign and military policy business as usual.

But more than that is clearly involved. Gorbachev, Shevardnadze, and others like them have evidently concluded that pursuit of the Soviet Union's old external agenda was not only imposing an unacceptable strain on the country's resources; they also appear to have made a fresh assessment of the military and political pay-

offs that have resulted from the enormous investments of their predecessors and to have found the benefits incommensurate with the costs and even counterproductive.

Gorbachev's foreign and security policy changes, which are said to be the product of "new thinking," have been most striking in arms control and in the Third World. In arms control, these changes have included a series of major concessions to Western positions—in START and INF; a major shift on verification; and announcement of major unilateral conventional arms reductions followed by a first phase opening proposal in the CFE negotiation that is closer to Western positions than was earlier anticipated. In the Third World, Moscow has taken steps to terminate Soviet and client military interventions in a number of countries, most dramatically in Afghanistan. Gorbachev's foreign policy toward the West has been marked by a series of conciliatory overtures, and by generally restrained international behavior.

What kind of U.S. response is warranted by these changes and how should we deal with the challenges and uncertainties without missing the opportunities? In my view, a strategy of what might be called step-by-step engagement is the most appropriate for the circumstances. It is a strategy that distinguishes between those opportunities for major improvements that have been made by Soviet changes that have already occurred; and those potential opportunities that might emerge only of there is further, deeper, more institutionalized, less readily irreversible Soviet change.

Of course, we have "engaged" the Soviet Union before, and did so on a broad front during the detente years. But now there are unusually favorable international conditions for pursuing longstanding Western interests on the traditional United States-Soviet agenda—controlling, and, if possible reducing the risks and costs of our ongoing competition. Unlike the detente period, global trends have been running sharply against the Soviets in the 1980's, and they know it. Gorbachev's long-term policy plans or intentions may be, the current circumstances of the Soviet Union constrain the Soviet leadership in ways that make it less inclined to fish in troubled waters abroad, and more open to agreements and arrangements to ease competitive pressures.

So where longstanding Western interests in managing East-West relations more safely, reliably, and at lower cost intersect with current Soviet interests in providing a congenial international atmosphere for perestroika, the case for engagement is in my view compelling and unambiguous. This means for example, moving ahead to complete a START-like agreement that would keep the nuclear arms control regime from unraveling. It means moving smartly to explore the common ground we have surprisingly found with the U.S.S.R. in CFE. It means continuing to cooperate in facilitating the disengagement of the U.S.S.R. or its clients from regional conflicts and exploring the possibilities of cooperation in new areas.

But in his more millenialist pronouncements, Gorbachev has also invoked the image not just of substantially improved, but of fundamentally transformed United States-Soviet and East-West relations, of relations in which competition is not only moderated and regulated, but essentially supplanted by a regime of comprehensive cooperation in an interdependent world. This implies a genuine paradigm shift in East-West relations entailing significant changes in the framework of international and alliance arrangements that has evolved since World War II, including far-reaching changes in Western security structures and strategies. To engage the Soviet Union politically and diplomatically on this level is therefore a much more complex matter, we have to be careful that anticipatory Western security restructuring does not outpace the profound and permanent structural changes that would be required on the Soviet side.

On this longer term, and thus far still nebulous agenda, we need to begin a dialog, with our allies, and with the Soviets, but here we have to move cautiously, step by step. In particular, we need to begin thinking through and articulating, for the benefit of our publics as well as the Soviets, the kinds of fundamental changes in the Soviet Union that we would need to see to have confidence that the Soviet Union had become a suitable partner for a fundamentally more cooperative and mutually trusting relationship. We need to ask ourselves what we might regard as persuasive evidence that such changes had actually taken place in the U.S.S.R. And finally, we have to begin asking ourselves what the West might be prepared to offer in return.

I can elaborate on this later if you would like, but, very briefly, we would need to see changes that go to the heart of the Soviet political and economic system and to its core relationship with Eastern Europe. For example, effective institutionalized domestic political constraints on the external behavior of Soviet leaders so that Soviet self-restraint should reflect more than the perhaps temporary choice of an unusual leader. We would need to see the termination of the heretofore unchallenged priority enjoyed by the Soviet military in claims on Soviet human and material resources. And we would need to see the evolution of the socialist states of East-

ern Europe toward greater self-determination so that their territories and resources would no longer be so readily at the disposal of the Soviet Union for potentially hostile purposes.

Let me sum up. Changes that have already occurred in Soviet internal development and external behavior justify vigorous and expeditious United States engagement with the U.S.S.R. in joint efforts to reduce further the costs and risks of managing the competitive aspects of our relationship that are still dominant. A fundamental reordering of East-West relations that would shift the balance between competition and cooperation sharply toward cooperation would require much more far-reaching and institutionalized Soviet change. We need to monitor Soviet developments carefully to see if such changes are taking place and be prepared, with our allies, to explore new horizons in relations with the Soviets if and as warranted by the changing conditions of the Soviet Union and Eastern Europe.

The CHAIRMAN. Thank you very much.

Ambassador Jordan.

STATEMENT OF DAVID C. JORDAN, FORMER AMBASSADOR TO PERU

Ambassador JORDAN. Mr. Chairman, Senators, it is a great privilege for me to be here with you this afternoon.

I would like to take this moment to also thank you for confirming me for my service in Peru some 3½ years ago. It was a great honor to me and my family. And I am grateful to the U.S. Senate for it.

My comments this afternoon are going to be focused primarily on interpreting changes in the Soviet Union and their implications for U.S. Latin American policy.

I believe the United States is faced with formidable challenges from Latin America, at the same time it is attempting to interpret potentially fundamental challenges within the Soviet Union.

The changes in the Soviet Union must be interpreted in part in the context of their potential impact on the many unresolved problems in Latin America.

I believe that even if the Soviet Union were to fulfill the hopes of the most sanguine about the promises of glasnost and perestroika, most of the challenges arising from the region would still exist.

Certainly a more moderate Soviet foreign policy and regime would abate the fears of these problems involving East-West strategic interests. Nonetheless, such promising Soviet changes probably would not lessen the challenges arising from the region independently of the East-West competition.

With these preliminary comments in mind, we will explore six challenges to U.S. Latin American policy in the era of perestroika.

The first, what is the likely impact of perestroika on Soviet policy toward Latin America?

Second, what are the principal constraints on a bipartisan prodemocratization policy toward Latin America?

Three, will the U.S. policy toward the debt crisis in Latin America go beyond treating the symptoms?

Will U.S. drug policy toward Latin America be coordinated with a comprehensive policy toward the region?

Five, will the immigration problem be understood as a Latin America migration and immigration crisis, and be incorporated into an overall policy toward the region?

And finally, the United States recognized the challenge posed by the continuation of revisionist states in the region, even if the Soviet policy is substantially moderated.

Turning now to the first challenge. I basically have discussed here three interpretations of the perestroika as they might impact on Soviet Latin American policy, and consequently, their implications for the United States.

The first interpretation I see is essentially the benign interpretation of what is occurring in the Soviet Union. And, in many ways, this is one of the most interesting interpretations I have encountered about what is going on in the Soviet Union in a long, long time.

For the benign interpreters of the process in the Soviet Union, perestroika is not merely a retreat from the arrogance of power or the kind of argument we have encountered all along about various opportunities over dealing with the Soviet Union, such as the Kennans have suggested.

This argument concludes that there is a potential fundamental change in the Soviet regime itself, that it could possibly be on the road to a transition to a democratic regime.

The reasoning behind this interpretation is fascinating because it is citing the Soviets themselves. What the benign interpreters are reading in the Soviet press is a growing interpretation among some Soviets themselves that democracy is a structural regime and goes beyond elections within a single party to elections within a competitive party system.

In January 1988 one Soviet publication concluded that it was the checks of the Congress that prevent the Executive from pursuing successfully aggressive policies.

The introduction to a recent Soviet book on perestroika argues that the party meeting in June 1988, "found it necessary to restore the leading role of electoral bodies with respect to the Executive and its apparatus."

One optimistic American interpreter concludes that, "if electoral bodies are to be restored to their leading role, then that must mean the body that performed this function in the past, the Communist Party, will no longer do so."

What is occurring in this view is not simply a reform of the system that has existed for 70 years, but rather a fundamental reorientation of its political philosophy and structure.

The Soviet chief of the Institute of State and Law has a statement that has cited that effect, and he says, "The philosophical foundations of the rule-of-law state were formulated by a Immanuel Kant." And what we have, in effect, those of you who are familiar, they are even using and citing some of the works of Karl Friedrick, who used to discuss in this regard these points at Harvard many years ago.

The revolutionary implication of this suggestion is that, should the Supreme Soviet develop as a parliamentary system, which included control over Soviet military forces abroad, then this perestroika would ultimately make NATO superfluous.

This benign interpretation of the perestroika would have equally far-reaching implications for Soviet-Latin American policy.

The Supreme Soviet would cut off assistance to proxy states, even if the KGB or other agencies of the permanent government wished to continue covert operations.

In effect, clandestine Soviet foreign operations would also come under independent review and check.

Marxist regional states would lose their capacity to promote insurgency because of the structural change in the Soviet oversight process.

Such a change would be a major step toward a cooperative world order.

The pessimistic interpretation, essentially, directly refutes this view. It sees, essentially, that what the Soviets are doing with their talk of the rule-of-law state is in practice, the Soviet old tactic of disinformation. What is underway is merely the dropping of the trappings of totalitarianism without changing the substance of the regime in order that the Soviets may once again benefit from a new detente.

Indeed, this interpretation goes beyond the fact that a simple deception against the West is underway. It is in fact a revitalization of the Soviet's internal system of repression disguised as liberalization.

The implications for Soviet foreign policy generally are that tactics, not objectives, have changed. The proposal for cutting Soviet troop strength is not a genuine change at all. The new tactic is designed to produce apathy toward the Soviet threat in Europe and thereby to undermine the Atlantic alliance by producing European pressures on, and United States desires for, a mutual Soviet and United States military withdrawal.

Now, the pessimistic interpretation would have equally significant implications for Soviet-Latin American policy. The Soviet Union now would have the best of all possible worlds: It could gain credit for wishing to stop the support of proxy insurgencies while its proxies continued to support armed routes to power and expansive Marxist states.

Now, the third interpretation, the one that I associate my perspective with, is the following:

The third view of the process underway in the Soviet Union is what I would call the p[illegible]dential. It, essentially, is based, as I suggest here, on probably the international relations theories of Raymond Aron and looks for transformations fundamentally in the context of the nature of the rivalry.

The new debate over perestroika is not merely, however, a repeat of the old debate on the end of the cold war because of alleged changes in the Soviet foreign policy and reputed changes in the realities of the international environment.

The problem for the prudential view, however, is the objective evidence of change and the standards for progress. Certainly there are some Soviet writers of importance who recognize that a regime change is necessary for the East-West rivalry to move beyond deterrence, balance of forces, and the like. But the problem really is establishing the kinds of standards to apply.

In this regard I will just make a brief comment, because my time is running out. The prudential interpretation suggests Soviet-Latin American policy would also only change gradually. The Soviet

policy line for the Latin American states is likely be analogous to what is necessary for the Soviet Union itself: Seek to gradually reduce its statism as it gets as much Western support as possible.

Now, the second challenge, and the one that I will only be able to spend a basic—the rest of my time on, will be the challenge this poses to the maintenance of U.S. bipartisan policy.

What then are the principal constraints for the continuation of a bipartisan U.S. policy toward Latin America?

My basic argument here is it will be in the context of us having an agreed upon set of criteria for evaluating democracy.

I propose we consider four general categories for this: Fairness in the democratic process; accountability of the permanent government to the elected administration and to society; three, a constitutional legal system which protects the balance of powers of the systems and the rights of society; and four, the development of national capital markets linked to market economies and private ownership of productive enterprise and property.

[The prepared statement of Ambassador Jordan follows:]

PREPARED STATEMENT OF DAVID C. JORDAN

The United States is faced with formidable challenges from Latin America at the time it is also evaluating potentially fundamental changes in the Soviet Union. The changes in the Soviet Union must be interpreted in part in the context of their potential impact on the many unresolved problems in Latin America. Even if the Soviet Union were to fulfill the hopes of the most sanguine about the meaning of "glasnost" and "perestroika" most of the challenges arising from the region would still exist. Certainly a more moderate Soviet foreign policy and regime would abate the fears of these problems involving east-west strategic interests. Nonetheless, such promising Soviet changes probably would not lessen the challenges arising from the region independently of the east-west competition.

With these preliminary comments in mind we will explore six challenges to U.S. Latin American policy in the era of perestroika. What is the likely impact of perestroika on Soviet policy toward Latin America? What are the principal constraints on a bipartisan pro-democratization policy toward Latin America? Will U.S. policy toward the debt crisis in Latin America go beyond treating the symptoms? Will U.S. drug policy toward Latin America be coordinated with a comprehensive policy toward the region? Will the immigration problem be understood as a Latin American migration and emigration crisis and be incorporated into an overall policy toward the region? Finally, will the U.S. recognize the challenge posed by the continuation of revisionist states in the region even if Soviet policy is substantially moderated?

We are now beginning our fifth year of dealing with the Soviet Union's remarkable leader, Mikhail Gorbachev. His rhetoric, style and personality have been so charismatic that the New York Times has declared the Cold War over, after two months in office the Bush administration is still continuing its review of the political and strategic implications of his rule, and Ronald Reagan left his Presidency with a far milder view of the Kremlin's leadership than he had when he entered. Gorbachev triggered this review and this re-thinking about the Soviet Union with his statements about Moscow's new orientation. He wrote in his widely read and publicized Perestroika: New Thinking For Our Country And The World:

> We certainly do not need an "enemy image" of America, neither for domestic nor for foreign-policy interests. An imaginary or real enemy is needed only if one is bent on maintaining tension, on confrontation with far-reaching and, I might add, unpredictable consequences. Ours is a different orientation.[1]

Because generations of Americans have become accustomed to periods of detente alternating with harsh Soviet rhetoric, interventions, repressions and support for guerrilla and terrorist proxies this new orientation has spawned a fascinating debate over what it means and what to do about it. Competing diagnoses of what is occurring in the Soviet Union have appeared and each would have different implications for Soviet Latin American policy.

There are three generic interpretations of what is going on in the Soviet Union. These three interpretations may be labelled the benign or optimistic, the pessimistic, and the prudential.

The benign interpretation goes significantly deeper than

---

[1]Mikhail Gorbachev, Perestroika: New Thinking for our Country and the World (New York: Harper and Row, 1987), pp. 216-217.

the long-time anti-ideological internationalist perspective of the Kennans and Fulbrights. In Kennan's words the Soviet Union "should now be regarded essentially as another great power, like other great powers" and in Fulbrights' words "we should have learned, above all that we, as a nation, are no more immune than the great powers of the past from the arrogance of power." For the benign interpreters of the Soviet Union's perestroika process it is not a Soviet retreat from the arrogance of power but nothing less than a transforation of potentially revolutionary implications of the Soviet regime, that is the Soviet regime may be in a transition into a democratic regime. This argument concludes that if this transformation succeeds it will not only effectively end the Soviet threat to its neighbors and the U.S. but also such a change would terminate worldwide Soviet support for subversion and proxy wars. The reasoning behind this interpretation is fascinating because it is citing the Soviets themselves.

What the benign interpreters are reading in the Soviet press is a growing interpretation among some Soviets themselves that democracy is a structural regime and goes beyond elections within a single party to elections within a competitive party system. In January 1988 one Soviet publications, the Kommunist[2] concluded that it was the checks of the Congress that prevent the executive from pursuing successfully aggressive policies. The introduction to a recent Soviet book on perestroika argues that the Party meeting in June 1988 "found it necessary...to restore the leading role of electoral bodies with respect to the

---

[2]Cited by Stanley Kober, The End of the Soviet Threat unpublished paper delivered at the Cato Institute, April, 1989.

executive and its apparatus." One optimistic American interpreter concludes that ..."if electoral bodies are to be restored to their leading role, then that must mean the body that performed this function in the past - the Communist Party - will no longer do so."[3] What is occurring in this view "is not simply a reform of the systems that has existed for 70 years, but rather a fundamental reorientation of its political philosophy and structure."[4] The Soviet's Chief of the Institute of State and Law, Vladimir Kudryavstev's statement that "the philosophical foundation of the rule-of-law state was formulated by I. Kant"[5] is cited as further evidence. The revolutionary suggestion is that should the Supreme Soviet develop as a parliamentary system which included control over Soviet military forces abroad then this perestroika would ultimately make "NATO superfluous".[6]

This benign interpretation of perestroika would have equally far-reaching implications for Soviet Latin American policy. The Supreme Soviet would cut off assistance to proxy states even if the KGB or other agencies of the permanent government wished to continue covert relations. In effect clandestine Soviet foreign operations would also come under independent review and check. Marxist regional states would lose the capacity to promote insurgency because of the structural change in the Soviet oversight process. Such a change would be a major step toward a cooperative world order.

The pessimistic interpretation raises a radical

---

[3] Ibid., p. 12.

[4] Ibid., p. 22.

[5] Ibid., p. 22.

[6] Ibid., pp. 24-27.

challenge to the optimistic interpretation of Soviet changes by Western observers and of the intentions of the Soviet writers they cite. What the Soviets are doing with their talk of the "rule of law" state according to this pessimistic view is practicing the Soviet's old tactic of disinformation. What is underway is merely the dropping of the trappings of totalitarianism without changing the substance of the regime in order that the Soviets may once again benefit from a new detente.

Indeed this interpretation goes beyond the fact that a simple deception operation against the West is underway. It is in fact a process of revitalizing the Soviet's internal system of repression disguised as a liberalization. Under the earlier rules of control the entire system had become corrupt and discredited. If the "public's trust and confidence" was to be restored in the organs of repression then "new and precise legal guideline" were needed.[7] The "rule of law state" slogan was created with this objective in mind.[8] Kudryaustev, who the optimists see as a Kantian, is in fact part of this disinformation process which the Legal Affairs Committee of the CPSU's Central Committee is leading.

In short a very deep deception is underway. The organs of repression are being strengthened and the West is enlisted in the legitimization of this process at the same time. Because internal control will be turned over to uniformed police officers, which the West will find reassuring, and because there will be an influx of commercial visitors attended to by the additional resources the KGB's Second and Fifth Directorates will now have, which the West will

---

[7]Editors, "Mr. Gorbachev's imperiled Political Theater" Nightwatch (Vol. 4, No. 2, March 1989), pp. 11-12.

[8]Ibid., p. 10.

consider an expansion of Soviet graciousness, will paradoxically enhance Gorbachev's image.

In the view of these interpreters:

> It is incumbent upon the West, then, to watch Soviet legal 'reform' carefully, for much is at stake. Should the Soviets succeed in scrapping the trappings of the police state without surrendering its substance, the West would lose heavily indeed. Not only would the Soviets succeed in undermining our justified confidence in moral superiority, they would also advance their disinformation campaign measurably...the Soviets would move closer to their goal of convincing the West they are 'just like us'.[9]

The implications for Soviet foreign policy generally are that tactics not objectives have changed. The proposals for cutting Soviet troop strength is not a genuine change at all. The new tactic is designed to produce apathy toward the Soviet threat in Europe and thereby to undermine the Atlantic alliance by producing European pressures on and U.S. desires for a mutual Soviet and U.S. military withdrawal.[10] The whole operation is, in short, disinformation, "an operation conducted to advance general policy objectives by tempting or provoking an adversary into taking actions that are ultimately contrary to his own best interests."[11]

This pessimistic interpretation would have equally significant implications for Soviet Latin American policy. The Soviet Union now has the best of all possible worlds: it can gain credit for wishing to stop the support of proxy insurgencies while its proxies continue to support armed routes to power and expansive Marxist states. Improved Soviet relations with the West will no longer be linked, if

---

[9] Ibid., p. 13.

[10] Nicholas Burakow, "Europe: Same Game Played by New Rules," Washington Times (April 10, 1989), p. C5.

[11] Nightwatch, op. cit., p. 9.

this tactic is successful, to regional conflicts supported by Soviet surrogates.

The third view of the process underway in the Soviet Union is the prudential. It long resisted the end of the cold war thesis propagated from the anti-ideological internationalist perspective, the view proclaiming "the disintegration of the old forms of great-power imperialism"[12] The end of the cold war proponents argued that the credibility of the Soviet military and strategic threat was over, and that it was permissible to conduct, carefully, trade and other relations with the Soviets as if it were just another great power. The prudential view, associated with the international relation theories of Raymond Aron, discusses great power rivalries as heterogeneous or homogeneous and carefully avoids language suggesting moral equivalence in great power contests. A heterogeneous rivalry is fundamental, it aims at a profound transformation either of the international environment or of the opposing regime(s) or of both.[13] A homogeneous rivalry is discrete and specific. It does not attempt to change fundamentally either the international environment or the opposing regime. The prudential view of the Soviet-U.S. rivalry has always perceived it as heterogeneous, just as Napoleon's was with Great Britain, Hitler's Germany was with the allies, Islam's was with Christendom, and the Arabs is with Israel.

The new debate over perestroika is not merely a repeat of the old debate on the end of the cold war because of alleged changes in Soviet foreign policy and reputed changes

---

[12]George Kennan, p. 17 in Martin F. Herz, ed., Decline of the West? George Kennan and His Critics (Washington, D.C., 1978)

[13]For a discussion see David C. Jordan, World Politics in Our Time, Chapters 13 and 1-6.

in the realities of the international environment. The prudential interpretation in this new debate remains cautious but recognizes that something significant may be occurring. It would share the assumption of the benign interpretation that international reform in the Soviet Union is the key to the ending of the Cold War because then the Soviet Union would indeed pose only a homogeneous rivalry competition for the West. The problem for the prudential view is the objective evidence of change and the standards for progress. Certainly there are some Soviet writers of importance who recognize that a regime change is necessary for the East-West rivalry to move beyond deterrence, balance of forces, and the like. But the numbers and political importance of these figures is still too low to provide anything but a beginning of a beginning toward a more stable international order based on a regime structure restraining Soviet authoritarianism.

Hence the cautious view toward perestroika. It does not discard the existence of forces pushing for change in the Soviet Union nor does it reject the possibility of some structural reforms. Based, however, on the evidence of the difficulties of other regime transitions and on the history of both Russia's and the Soviet's failures to produce in the past irreversible transformations from authoritarianism, the prudential interpretation not only sees perestroika as reversible but also as not having crossed the threshold of deciding irrevocably to transform itself. In short, the burden of proof is on the Soviets, not the West, that fundamental changes are in the works. More likely, the prudential view holds is the continuation of authoritarianism

with the reforms serving to keep the party in control and encouraging the West to help revitalize the economy.[14]

In this interpretation Soviet policy objectives can be assumed to change only slowly and in a direct relationship to the success of the growth and strength of the internal structural changes the Soviets themselves have said are necessary to a rule of law state. This suggests premature U.S. and Western trade and other concession might serve to inhibit rather than to assist the necessary internal structural reforms by making reforms seem unnecessary to the forces opposing perestroika.

This prudential interpretation suggests Soviet Latin American policy will also only gradually change. The Soviet policy line for the Latin American states is likely to be analogous to what is necessary for the Soviet Union itself: seek to be as statist[15] as possible while getting the West to support it as much as possible. The Cubans will not be cut adrift but will be facing growing restraints while being allowed to support armed insurgencies.

**

The second challenge will be to the maintenance of a U.S. bipartisan policy. What then are the principal constraints for the continuation of a bipartisan U.S. policy toward Latin America? One, which we have already discussed,

[14]Appendix I.

[15]The authoritarian regime is usually statist. Statism is characterized by etatism (statization) and integral nationalism. Statization is the trend toward centralized control of economic activity and integralism is the tendency to blur the distinction between society and regime, so that the rights and powers vested in the people are transferred to the regime.

will be over the nature of the Soviet threat itself. Since the overt Soviet policy toward the region most likely will be peaceful rather than violent, and seek Western economic assistance even for Marxist regimes there, unless the prudential view is widely shared partisanship is likely to return over interpreting the meaning of the Soviet role and the nature of Latin democracy.

The second problem then will arise over interpreting elections and regimes. For U.S. bipartisanship to be sustained both the executive and the Congress must have a better agreed upon set of criteria for certifying the democratic regime than is presently the case. Since it seems highly likely the Soviets will back the access to power of marxists to government through the popular front or other electoral processes the U.S. must be in a position to explain why such regimes are not democratic so that the Latin American populations do not equate democracy with the sort of political and economic disasters that are invariable produced when various sorts of statist and authoritarians are elected. It must be understood among both branches of government that fair and just electoral systems are necessary but not sufficient for the establishment of the democratic regime for our foreign policy purposes and interest.

I propose that the U.S. use four general categories for establishing the existence of the democratic regime. These categories are prescriptive and descriptive of the democratic regime and within each category there are a number of essential elements. The principal categories are (1) fairness in the democratic process, (2) accountability of the permanent government to the elected administration and to society, (3) a constitution and legal system which protects the balance of powers of the system and the rights of

society, and (4) the development of national capital markets linked to market economics and private ownership of productive enterprises and property. Fairness within the process at least means adult suffrage, access to media, competitive parties, and protection of voting equivalence. Accountability means in fact non-elected officials are subordinated to elected ones, elected officials are accountable to the population, and the societal institutions promote a civic culture over a statist one. A constitutional legal order means all officials are accountable before antecedent and enforceable rules of law, the system's balance is maintained, and the rights of individual and of the community are protected from state infringement. The nation's national capital is protected when citizens' savings are insured, when the regime does not confiscate its citizen resources, and when capital flight is voluntarily stopped showing the citizens have trust in the state's economic policies.

***

The third challenge to the U.S. will be to use the debt crisis to help Latin America move toward a democratic regime. Both the Baker plan and the Brady plan are positive steps. The focus of both is toward government liquidity and bank solvency. That objective has barely seen set but the opportunity to move Latin societies toward democratic capitalism - that is, free-enterprise systems and national capital markets which sustain independent societies - was largely missed. The model way for approaching this objective is probably provided by Alexander Hamilton's successful funding of the U.S. domestic debt during this nation's

founding. Under the present circumstances a coordinated policy with the IMF and the World Bank whereby debt instruments could be purchased from the Bank, resold in individual Latin countries through their central Banks, and guaranteed by the IMF and World Bank might be one way to start Latin nations developing national capital markets.

****

The fourth challenge to the U.S. will be to have a drug policy linked not only to trafficking as a social problem but also to U.S. regime policy. Nearly everyone is now aware of the grave challenge the drug trade poses to our societies. Attacking both consumption and production are standard with all proposals. What is not yet fully realized is that the drug problem also undermines the democratic regime and is particularly dangerous to Latin America's struggling new democracies legal orders. If, as we believe, a constitutional legal order is essential to a working democratic regime, then the U.S. must include support for judicial systems, law enforcement agencies, and possibly militaries in its effort to meet the drug challenge to the Latin regime.

*****

The fifth challenge is that what the United States perceives as an immigration crisis is really a Latin American emigration problem. The U.S. approach is seen as how to absorb or discourage the tens of thousands of displaced persons heading for the U.S. For example the Simpson-Rodino law seeks to absorb the illegal immigrants who can prove that

they started living in the U.S. prior to 1982 and to discourage further migrations by imposing fines on employers who have knowingly hired illegal immigrants since the bill was passed on November 6, 1986.

The problem, however is not merely the attraction of the U.S. for voluntary immigrants, but the displacement of millions of people because of Marxist violence, poverty, government mismanagement and corruption, and the growth of general lawlessness within Latin America itself. The response, again, must be in sustaining or helping implement the democratic regime with its essential features. In other words, as in the other challenges, the U.S. must not pursue one of them at the expense of the overall need to support the democratic regime.

******

The sixth challenge arises from the revisionist Marxist states and forces within the region itself. It is now well established that the indigenous Marxist states of the region support debt cartels, drug trafficking, subversion and terrorism, and produce poverty and thereby export their people to their neighbors and the U.S.

The Soviet-Cuban Treaty of Friendship clearly represents an understanding that the Cuban line of supporting military assistance to revolutionary movements will not be interfered with directly. Obviously Cuba and its allies in the region will continue to do what they always have. Consequently, even if the Soviet support for Cuba abates somewhat Castro will not abandon his hard-line revolutionary agenda. Once again the U.S. will find its effort to support the democratic regime in the area undermined by political forces fundamentally hostile to U.S. policy objectives.

****

In summary we are arguing that probably the best approach for interpreting Soviet foreign policy in the age of perestroika is the prudential. It does not dismiss the existence of powerful forces for change in the Soviet Union or the signs of growing Soviet awareness that for the Soviet Union to be treated as a non-revolutionary great power structural changes probably must occur within the Soviet regime. In this view Soviet foreign policy objectives can be expected to change only slowly and in direct correlation to the growth of structural reform. Soviet Latin American policy can be expected to be congruent with this gradual change: that pro-Soviet states will be supported by peaceful means in the region so that they can be aided by the West as the Soviets hope to be. They, as the Soviets, would seek credits, loans, joint ventures and access to Western technology.

This Soviet policy will pose a challenge to the U.S. effort to forge a bipartisan policy toward the region. Without an agreed framework for interpreting the democratic regime, the Soviets with their support for elected statist politicians may drive a wedge between those trying to maintain bipartisanship. It will require an understanding between the executive and the Congress on the essential requirements of the democratic regime to forestall this problem.

The other challenges of debt, drugs, immigrations, and the region's own Marxist states will all contribute to pressure on U.S. policy coherence toward Latin America. We have argued that the framework for coherence in both interpreting the Soviet and regional challenges is the democratic regime. This policy will (a) support structural reform in the Soviet Union, (b) maintain U.S. bipartisanship

by providing a framework for judging the democratic credentials of elected officials, (c) promote national capital markets by using the debt crisis to break the cycle of loans and default, (d) use the drug crisis to strengthen the legal orders of fragile democracies, (e) address the regions internal migrations as products of weak democratic capitalist economies, and (f) expose the region's own Marxist regimes as active agents opposing regime democracy.

APPENDIX I

It is possible to see changes occur, even steps toward the increase in popular participation and civic freedoms without the major statist features of authoritarianism disappearing. The Soviet system is in a political and economic crisis. The communist Party needs its legitimacy refurbished and the economy needs revitalization. The standard method of relegitimizing a one party system is to increase the appearance of participation, to promote self-criticism and to call for reform. Such a pattern has occurred before not only for the Soviet system but for autocratic Russia as well. In this historical perspective regime crises did not produce regime transformation but regime renewal, reform not revolution. Jacques Chirac has noted this about autocratic Russia. He wrote regarding the history of Russia that there was a repeated effort to shape in the West a "progressive image of Russian evolution". And concluded:

> Thus, Catherine the Great created, through her correspondence with the philosophers of the Enlightment, the image of a liberal sovereign, at the very time when she was consolidating the power of the Russian nobility and worsening slavery. Count Witte, the great Minister of Finance to Tsar Alexander III, argued for bringing Russia and the European democracies closer together so that the latter might be persuaded to finance economic and military development in the Empire under the guise

> of continually renewed credits, not withstanding the tightening of the absolutist reins of the Tsarist regime at the time.[16]

The great Soviet scholar, Merle Fainsod, had a prudential view toward the administrative structural reform period during the Khrushchev period. He wrote in his classic work How Russia is Ruled the following:

> The Khrushchevian reforms in the governmental and administrative area sought to combine wider popular involvement and participation in the political process with measures to correct the top-heavy centralization which carried over from the Stalinist ear. The Supreme Soviet was given an appearance of greater importance by convening it more frequently, stirring its commissions into life, and using it as a platform for important reports and announcements. Local Soviets which had languished under Stalin were revived, given broader responsibilities, and directed to enlist the public in their activities. Now as well as older variants of so-called agencies of public self-government, such as the people's militia (druzhiny) and comrades' courts, were activated in an effort to involve the population more directly in the preservation of law and order and the maintenance of labor discipline. The impressiveness of these efforts was qualified, however, by the insistence of the party on controlling the activities of these bodies and on dictating the policies which they were duty bound to execute.[17]

These quotes from Fainsod are interesting because he wrote them before the fall of Khrushchev. He also noted that reform might not prevent an aggressive foreign policy. He wrote: "This assumption that an aggressive and expansionist policy abroad cannot be pursued by a regime which is also taking steps to improve the lot of its own people requires close examination."[18]

Perestroika in this perspective is not irreversible and in any case the party retains its highly centralized

---

[16]Jacques, Chirac, "Soviet Change and Western Security," Strategic Review (Washington, D.C.: Winter 1989), p. 14.

[17]Merle Fainsod, How Russia is Ruled (Cambridge Harvard University Press, 1963), p. 126.

[18]Ibid., p. 597.

organization and its capacity "to hold disintegrative tendencies in check."[19]

In the prudential perspective, the economic reforms also ultimately serve to maintain the party and revitalize the economy. Lenin's response to economic crisis was the New Economic Plan. Proclaimed in 1922, it proposed a gradual return to a free market and sought foreign credit and investment. Some of the first firms involved were U.S.[20] The key to economic revitalization was the Soviet oil industry, without it earning vital foreign exchange other investments and loans were not likely. Concessions were granted in October 1921 to U.S. and other foreign firms to drill and to export Soviet oil from the Baku fields in the Caucasus. The second largest potential source for earning the Soviet's foreign exchange was in the substantial Soviet manganese deposits. An agreement to exploit the Chiaturi deposits was signed in July 1925. Looked at in this perspective the new Soviet agreement with six major American companies repeats the pattern. The key agreement, of course, is with Chevron which can use its profits from exporting Soviet oil to provide foreign exchange to the other companies involved in joint ventures. As reported in The Wall Street Journal:

> Chevron is one of the keys to the consortium's success. Sources say it is working with the Soviet Oil Ministry to find a possible site for joint oil and gas exploration and development. The products from its ventures are potentially the consortium's biggest earner of foreign currency, which could be used to overcome the problem of the ruble's nonconvertibility.[21]

---

[19] Ibid., p. 127.

[20] International Barndsdall Corporation and W. H. Harriman Co. were early investors.

[21] The Wall Street Journal, March 30, 1989, p. 2A.

When one looks at other Soviet-driven detente periods there are similar efforts to gain economic advantage from the West. In the mid-1930s, Stalin started a reconstruction program which gained the USSR recognition, credits, and trade. Brezhnev also had his detente which gained him trade and some technology. The prudential view argues that the Soviets have a history of offering concession abroad and reforms at home for desperately need economic assistance. But these changes are rarely institutionalized, and, until they are, caution is necessary. But this view goes even further. Even if substantial changes are institutionalized, as evidenced by other transition processes, such reforms are not irreversible. In fact elements of a democratic regime can coexist with elements of authoritarianism and the proof of regime change is a long process.

The CHAIRMAN. Thank you very much, indeed, Ambassador Jordan. Dr. Mandelbaum, I am very glad to have a representative of the Council on Foreign Relations.

STATEMENT OF DR. MICHAEL MANDELBAUM, DIRECTOR, PROJECT ON EAST-WEST RELATIONS, AND SENIOR FELLOW, COUNCIL ON FOREIGN RELATIONS, NEW YORK, NY

Dr. MANDELBAUM. Thank you, Mr. Chairman, I am pleased to be here. I have prepared a statement, a copy of which is before each of you, and since reading the entire statement would, I think, exceed my allotted 10 minutes, I will read excerpts from it.

Soviet foreign policy is changing, and to our advantage. Hardly a month has gone by in the last 2 years without a favorable international development directly or indirectly tied to Moscow's relations with the rest of the world.

I wrote this statement in the week beginning April 10. The previous week saw Vietnam's announcement of the date for its final withdrawal from Cambodia in agreement between the regime and the opposition in Poland on a new political system for that country, and a statement by the General Secretary of the Communist Party of the Soviet Union disavowing the export of revolution, a statement made in Havana, the capital of a country in which revolution is the chief export, and to countries other than the Soviet Union, virtually the only one.

Just a few years ago, any of these events would have been cause for astonishment as well as celebration. Now they seem almost routine. The stream of good news and good deeds raises a question

that is implicit and sometimes openly posed, indeed, openly posed by my two predecessors at this hearing in the American debate on how to respond to General Secretary Gorbachev.

The question is, how long will this last? How deeply rooted are the recent changes in the Soviet international conduct? Are we seeing a temporary respite from the competition with the West or a genuine and sweeping reorientation of Soviet policy? Are we, in short, witnessing a change of velocity or a change of direction?

Now, in the end, the present period may, indeed, prove to be one of tactical retreat, rather than strategic reversal for the Soviet Union. After all, the Soviet Union has retreated before. There have been periods of detente with the West and the United States before that did not lead to lasting change. But, even if what the Soviet leaders are seeking is only a pause in their rivalry with the West, rather than a complete end to it, their policies still have potential benefits for us.

The pause may last a long time. The task of domestic reform, on behalf of which this new foreign policy has been undertaken, is a huge one. It will take decades, perhaps even generations to complete, if it can be completed at all. A foreign policy intended to complement this domestic reconstruction could have a very long run.

But, beyond this, there is, I think, reason to believe that the new Soviet foreign policy will endure, that is does have deep roots, that the present period of detente will not simply ease the 40-year conflict between East and West but, in fact, transform it. For now, unlike the past, changes in foreign policy are accompanied by sweeping changes in the internal order of the Soviet Union. The reigning ideology is disappearing. The character of international politics and the Soviet role in it are being reevaluated, and the Soviet political system is in the midst of substantial modification. Therefore, we can at least hope for a much more accommodating Soviet foreign policy in the future because if these internal changes continue, a very different Soviet Union will be carrying them out.

On the issue of ideology, the Soviet Union remains nominally committed to socialism, but the definition of socialism itself is now a matter of personal taste and intense debate. And the collapse of Marxism-Leninism—and that, I believe, is what we are seeing—affects Soviet foreign policy because ideological commitment fueled the Soviet Union's outward drive. The allegiance to ideological precepts, even if they were not faithfully observed at home, served as a source of energy, of confidence, and of a sense of international mission. None is now as powerful as it was because that allegiance has been so weakened.

Moreover, the Soviet Union tended to adopt clients abroad who were, themselves, professed Marxist-Leninists, and, as such, committed to political practices repugnant to us. Fidelity to Communist ideology tied the Soviet Union to foreign tyrants. Gorbachev paid a call on one of them in Havana earlier this month and seemed reassuringly unhappy in his company. As the commitment to ideology wanes, so does the inclination to support such characters as Fidel Castro.

Finally, to the extent that the definition of socialism is unclear, it becomes more difficult and less important to enforce it in neigh-

boring countries. The dimming of ideological commitment in Moscow is one reason, although scarcely the only reason, for the remarkable developments that are taking place in Poland and Hungary, the most important developments in that part of Europe in 40 years.

The second change I would cite in the Soviet internal order is the new thinking in foreign policy. This new thinking abandons the familiar Soviet emphasis on the inherent conflict between the capitalist and the communist worlds in favor of the claim that powerful common human interests unite all mankind. It propounds a sober, skeptical view of the political gains that the use of force can achieve in the final decade of the 20th century. Perhaps most importantly, it advances the idea of common security, according to which, in the nuclear age, neither the United States nor the Soviet Union can hope to achieve a significant military advantage over the other and that efforts to do so are bound to prove counterproductive.

Now, we have heard such words before from other Soviet leaders, notably Mr. Brezhnev. But in this instance, the new thinking seems to have not only the support of the Soviet leadership but also some connection to actual Soviet military policies and a base, of sorts, in Soviet society.

The third important internal change in the Soviet Union involves the rules and customs of Soviet domestic life, including glasnost, democratization of the political system, and official tolerance for a wide variety of independent groups and associations. By creating an arena for political debate and discussion, this process of internal liberalization promotes the collapse of the traditional Soviet ideology and the growth of a new thinking in international affairs.

Internal liberalization also promises to give the Soviet public something that it has never had: a voice in the determination of public policy, including foreign policy. While it is hardly guaranteed that the public will exercise a moderating influence on Moscow's relations with the rest of the world, what we know about the widespread dissatisfaction in the country with foreign adventures like the war in Afghanistan gives us reason to believe that, were it up to him or her, the average Soviet citizen would conduct a less belligerent foreign policy than did Lenin, Stalin, Khrushchev and Brezhnev.

Finally, internal liberalization in the Soviet Union can address one of the concerns that the trend in Soviet foreign policy has provoked in this country, namely, that it might be abruptly reversed to the detriment of the West. The more democratic a country is, the more fully exposed to public scrutiny are its mechanisms for setting policy, the less likely it will be to change the course of its foreign policy sharply, suddenly, secretly, and without apparent cause. Now, if this analysis is correct, if Soviet foreign policy is truly changing, what are the implications for the United States?

The new Soviet foreign policy, if it becomes formally established, will pose two broad challenges to this country in the years ahead. One is a conceptual challenge. It is the challenge of defining the best of all possible relationships with the Soviet Union. For example, the abolition of all weapons, or even all nuclear weapons, is not feasible no matter how faithful to the new thinking Soviet for-

eign policy turns out to be. We will, therefore, still be left with the task of deciding what weapons we will require.

The second challenge is political in character. It is the challenge of navigating in a world that is more fluid and less clearly marked than the one that we have known for four decades. The struggle with the Soviet Union has served as a powerful organizing principle for American foreign policy. It has defined friends and adversaries, threats and opportunities, obligations and risks. A new Soviet foreign policy will create a new world, which will require a new American foreign policy. Such a policy is likely to be more intellectually taxing than in the past, but perhaps less militarily dangerous. More agility but less sheer strength will be called for. We ought to welcome this challenge, for the new world that is now in view is the one that we have sought to bring about for 40 years, whether we realized it or not. In any event, if the current Soviet policies are sustained, this is the world in which we will have to live, whether or not we like it and whether or not we are prepared for it. Thank you.

[The prepared statement of Dr. Mandelbaum follows:]

PREPARED STATEMENT OF DR. MICHAEL MANDELBAUM

Soviet foreign policy is changing, and to our advantage. Hardly a month has gone by in the last two years without a favorable international development directly or indirectly tied to Moscow's relations with the rest of the world. I am writing this statement in the week beginning April 10. The last week saw Vietnam's announcement of the date for its final withdrawal from Cambodia; an agreement between the regime and the opposition in Poland on a new political system for that country; and a statement by the General Secretary of the Communist Party of the Soviet Union disavowing the export of revolution, a statement made in Havana, the capital of a country in which revolution is the chief export -- and to countries other than the Soviet Union virtually the only one.

Just a few years ago any of these events would have been cause for astonishment as well as celebration. Now they seem almost routine.

The stream of good news and good deeds raises a question that is implicit, and sometimes openly posed, in the American debate on how to respond to General Secretary Gorbachev. The question is, How long will this last?

To put it in different terms, how deeply rooted are the recent changes in Soviet international conduct? How fundamental are they? The Soviet Union has been pulling back from positions it staked out over the last several decades. Are these departures from the more familiar pattern of its foreign policy undertaken to provide a temporary respite from the competition with the West, during which Moscow will seek to regroup, regain its strength, and then resume its global offensive? Or are these measures part of a genuine and sweeping reorientation of the Soviet Union's relations with the rest of the world?

Are we, in short, witnessing a change of velocity or a change of direction?

In the end, the present period may prove to be one of tactical retreat rather than strategic reversal for the Soviet Union. There is always an ebb and flow in the foreign policies of great powers; moments of retrenchment punctate even the most aggressive campaigns of expansion. Moscow has sometimes sought to portray its international presence as a juggernaut with no reverse gear, but this image is not accurate. The Soviet Union has withdrawn frequently since 1917: from Warsaw in 1920, from Iran in 1946, from Port Arthur in 1953, from Austria in 1955, and from Egypt in 1972.

Relations between the United States and the Soviet Union have, it is true, improved markedly since Mikhail Gorbachev came to power in 1985. But there have been previous periods of detente: after Stalin's death in 1953, in the wake of the Cuban missile crisis in 1963, and most notably with the signing of the initial strategic arms control accords in 1972. None endured, because none was the result of a basic change in the purposes and methods of Soviet foreign policy.

As their predecessors sometimes did, Gorbachev and his colleagues may simply have decided to liquidate unprofitable military ventures in Afghanistan, Angola, and Cambodia and make some adjustments in Soviet military deployments with the aim of promoting a tranquil international atmosphere in which they can concentrate on internal reconstruction, but also with the aim of returning eventually to the quest for power and influence that has put their country at odds with the West. Moscow has not, after all, cut its ties with Vietnam, or Ethiopia, or Cuba, or Syria. Its military production lines have not shut down.

Even if what the Soviet leaders are seeking is only a pause in their rivalry with the West rather than a complete end to it, their policies still have potential benefits for the United States. The pause may last a long time. The task of domestic reform, on behalf of which this new foreign policy has been undertaken, is a huge one. It will take decades, perhaps even

generations, to complete. A foreign policy intended to complement it could have a long run. In international affairs, as with other things, often nothing is so long-lasting as what is supposed to be temporary.

In fact, most policies are temporary at the outset. Grand strategies grow out of modest, hastily devised measures. Analysts have the luxury of devising sweeping conceptual schemes to explain political behavior. Statesmen, by contrast, must live in, if not for, the moment. They improvise policies in response to new and pressing circumstances -- which we call crises. If the policies succeed, they are continued and given titles (we like to call them doctrines), then elevated to the status of broad principles. So it may be -- let us hope that it will be -- with the Gorbachev foreign policy.

Indeed, there is reason to believe that the new Soviet foreign policy will endure, that it does have deep roots, that the present period of detente will not simply ease the forty-year conflict between east and west but, in fact, transform it. For now, unlike the past, changes in foreign policy are accompanied by sweeping changes in the internal order of the Soviet Union. The reigning ideology is disappearing; the character of international politics, and the Soviet role in it, is being reevaluated; and the Soviet political system is in the midst of substantial modification.

We can hope for a much more accommodating Soviet foreign policy in the future because, if these internal changes continue, a very different Soviet Union will be carrying them out.

The precepts of Marxism-Leninism, by which the Soviet Union has claimed to live since 1917, have become increasingly hollow, as well as irrelevant to the reality of Soviet life over the years. Since Gorbachev has come to power, the erosion of ideology has become an avalanche. The pretense that the canons of the Communist patriarchs hold the answer to every terrestrial question has been been not simply quietly abandoned but

emphatically rejected. The Soviet Union remains nominally committed to socialism, but the definition of socialism itself is now a matter of personal taste and intense debate.

The collapse of Marxism-Leninism affects Soviet foreign policy because ideological commitment fueled the Soviet Union's outward drive. Scholars have often debated whether the motor force of Soviet conduct in the world was Marxism-Leninism or Russian nationalism. The answer is that both were involved. The allegiance to ideological precepts, even if they were not faithfully observed at home, served as a source of energy, of confidence and of a sense of international mission. None is as powerful as it was because that allegiance has been so weakened.

Moreover, the Soviet Union tended to adopt clients abroad who were themselves professed Marxist-Leninists, and as such committed to political practices repugnant to us. Fidelity to Communist ideology tied the Soviet Union to foreign tyrants. Gorbachev paid a call on one of them in Havana earlier this month, and seemed reassuringly unhappy in his company. As the commitment to ideology wanes, so does the inclination to support such characters as Fidel Castro.

Finally, to the extent that the definition of socialism is unclear it becomes more difficult, and less important, to enforce it in neighboring countries. The dimming of ideological commitment in Moscow is one reason, although scarcely the only one, for the remarkable developments that are taking place in Poland and Hungary -- the most important developments in that part of Europe in forty years. The Soviet Union is more likely to tolerate freedom in neighboring countries the less firmly rooted at home are doctrines lending legitimacy to authoritarian political institutions.

Gorbachev has been more specific about the principles that should govern his country's relations with other countries than about the proper guidelines for organizing Soviet society itself.

He is the chief architect of what is called the "New Thinking" in Soviet foreign policy.

The New Thinking abandons the familiar Soviet emphasis on the inherent conflict between the capitalist and the Communist worlds in favor of the claim that powerful common human interests unite all mankind. It propounds a sober, skeptical view of the political gains that the use of force can achieve in the final decade of the twentieth century. Perhaps most importantly, it advances the idea of "common security," according to which in the nuclear age neither the United States nor the Soviet Union can hope to achieve a significant military advantage over the other and that efforts to do so are bound to prove counterproductive. This last idea is a recurrent theme of Gorbachev's.

None of these thoughts is entirely new, even for a Soviet leader. More than a decade ago Leonid Brezhnev disavowed the aim of military superiority, asserted that nuclear war was unwinnable, and stressed the need for arms control agreements. Gorbachev, however, gives greater evidence of actually believing what he says. He and his colleagues offer a more coherent presentation of these ideas than the occasional speeches of their predecessors. The New Thinking also carries conviction because it has been accompanied by a series of initiatives and proposals -- the Intermediate-range Nuclear Forces treaty, for example, the progress in the negotiations to make deep cuts in strategic nuclear weapons, and the unilateral reduction of Soviet troop strength in Europe -- that have begun to put its principles into practice.

Moreover, the words of the present Soviet leaders have ushered in a vigorous and unprecedented public discussion of the requirements of Soviet security. Proposals for change far more extensive than any suggested by the leaders, such as the conversion of the Soviet army to an all-volunteer force, have been aired.

The New Thinking thus seems to have not only the support of

the Soviet leadership, but also some connection to actual Soviet military policies, and a base of sorts in Soviet society.

The changes in the rules and customs of Soviet domestic life have been the most striking features of Gorbachev's first four years in power. They include glasnost, the dramatic broadening of the boundaries of permitted debate; the democratization of the political system, the most recent milestone in which was last month's elections to the new Congress of People's Deputies in which powerful Party officials were repudiated; and official tolerance of a wide variety of independent groups and associations, Stalin's suppression of which was the essence of totalitarian rule in the Soviet Union.

By creating an arena for political debate and discussion, this process of internal liberalization promotes the collapse of the traditional Soviet ideology and the growth of the New Thinking in international affairs.

Internal liberalization also promises to give the Soviet public something it has never had: a voice in the determination of public policy, including foreign policy. While it is hardly guaranteed that the public will exercise a moderating influence on Moscow's relations with the rest of the world, what we know about the widespread dissatisfaction in the country with foreign adventures like the war in Afghanistan gives us reason to believe that, were it up to him or her, the average Soviet citizen would conduct a less belligerent foreign policy than did Lenin, Stalin, Khrushchev and Brezhnev.

Finally, internal liberalization in the Soviet Union can address one of the concerns that the trend in Soviet foreign policy has provoked in this country: namely, that it might be abruptly reversed, to the detriment of the West. The more democratic a country is, the more fully exposed to public scrutiny are its mechanisms for setting policy, the less likely it will be to change the course of its foreign policy sharply, suddenly, secretly, and without apparent cause.

If this analysis is correct, if Soviet foreign policy is truly changing its direction and not merely its velocity, if we are, in fact, entering a new era in international relations in which the sharp polarization of the Cold War has passed, what are the implications for the United States? The new Soviet foreign policy will pose two broad challenges to this country in the years ahead.

One is a conceptual challenge. It is the challenge of defining the best of all possible relationships with the Soviet Union. Some things will change, but not all things. There is a difference between a new era in international politics and the end of international politics as we have known it for twenty-five centuries. For example, the abolition of all weapons, or even all nuclear weapons, is not feasible no matter how faithful to the New Thinking Soviet foreign policy turns out to be. We will therefore still be left with the task of deciding what weapons we will require. (I have offered some thoughts on this general subject in an article entitled "Ending the Cold War" that appears in the Spring, 1989 issue of the journal Foreign Affairs.)

The second challenge is political in character. It is the challenge of navigating in a world that is more fluid and less clearly marked than the one we have known for four decades. The struggle with the Soviet Union has served as a powerful organizing principle for American foreign policy. It has defined friends and adversaries, threats and opportunities, obligations and risks. (It has also sanctioned a number of undertakings that were worthy in their own right but might not have received the necessary support had they not been tied to the great global rivalry. In the United States in the postwar period roads were built, scientific projects funded, foreign languages taught, and capital and technology sent abroad in the interest of winning the contest with the Soviet Union.)

The Cold War is likely to become less important not only for the two global rivals themselves but for other countries as well.

Indeed, the prominence of the United States in the postwar world has been partly the result of our conflict with the Soviet Union. The United States became the leader of a military coalition that included Western Europe, Japan, and other countries, and because a large part of East-West relations concerned military questions, Washington dominated Western dealings with Moscow.

A new, more accommodating Soviet foreign policy will change this. Since the end of World War II, for example, relations between the Soviet Union and Japan have been frozen in hostility. The relationship between these two Asian giants has in fact been but one battleground of the larger Cold War. For the Japanese the Soviet Union has been a military threat and the occupier of part of their country and nothing more. For Moscow, Japan has been little more than a large American aircraft carrier off the coast of Asia.

If the current trends of Soviet foreign policy continue, this will change. The two will have more extensive dealings with each other. They will discover common interests. American policy in East Asia, and elsewhere, will thus become a good deal less straightforward than it has been in the past.

A new Soviet foreign policy will create a new world, which will require a new American foreign policy. Such a policy is likely to be more intellectually taxing than in the past, but perhaps less militarily dangerous. More agility, but less sheer strength will be called for.

We ought to welcome this challenge. For the new world that is now in view is the one that we have sought to bring about for forty years, whether we realized it or not. In any event, if the current Soviet policies are sustained, this is the world in which we will have to live, whether or not we like it, and whether or not we are prepared for it.

The CHAIRMAN. Thank you very much, Dr. Mandelbaum, and your full statement will be printed in the record, I would add. Dr. Staar.

STATEMENT OF DR. RICHARD F. STAAR, FORMER AMBASSADOR TO MBFR NEGOTIATIONS; COORDINATOR, INTERNATIONAL STUDIES PROGRAM, HOOVER INSTITUTION

Dr. STAAR. Thank you, Mr. Chairman. I would like also to submit the prepared statement for the record.

The CHAIRMAN. Without objection, all four prepared statements will be inserted in the record.

Dr. STAAR. Mr. Chairman, as well as a copy of an article that appears in the current issue of Strategic Review, which bears on my testimony.

The CHAIRMAN. Without objection.

Dr. STAAR. Mr. Gorbachev's selection to the position of CPSU General Secretary 4 years ago inaugurated a self-proclaimed new era in Soviet foreign policy, especially vis-a-vis the United States. There has taken place in the meanwhile a restructuring of the decisionmaking process, moving the locus of power from the foreign ministry to the central apparatus of the party.

Now, the basic question centers on whether or not the Kremlin leadership, rhetoric aside, still espouses traditional Soviet attitudes and objectives. The foundation of the new era is Mr. Gorbachev's new political thinking, which selectively reinterprets Marxism-Leninism to fit the changing nature of international relations. The peaceful coexistence it seems to promise has been received enthusiastically throughout the world.

At the same time, an energized public relations campaign is being conducted by a rejuvenated propaganda machine newly organized so as to implement Soviet foreign propaganda objectives more effectively. It is headed by a staunchly anti-American apparatchik, Aleksandr Iakovlev, and even though the current party line is to downplay the traditional enemy image of the United States and to emphasize an East-West dialog, standard operating procedures continue to be applied from Moscow. These include disinformation, espionage, theft of high technology and, perhaps most importantly, significant additions to the U.S.S.R.'s military power. Some of these will be discussed in the following.

Today there are five major disinformation campaigns being conducted, alleging that the U.S. Government is involved in: No. 1, development of an ethnic weapon that will kill only nonwhites, and I have the sources for this. This happens to be Zia ul-Ha Batiska, February 19, 1989. The 1978 Jonestown massacre in Guyana: CIA murdered these people allegedly because they wanted to move to the Soviet Union. The continuing biological warfare efforts of the U.S. Government, including the manufacture of AIDS, the AIDS virus at Fort Detrick near Frederick, MD: Moscow radio. Assassination of world leaders by the CIA, Indira Ghandi, Olaf Palme, President Zia of Pakistan, and the attempted murder of Pope John Paul II.

Incidentally, as a footnote, the FBI supposedly murdered Martin Luther King. This appeared in Literaturnaia gazeta on January 20,

1988. And, finally, the most outrageous, deliberate falsehood is that we are importing babies from Latin America, butchering them, and selling body parts for organ transplants. This appeared in Sovetskaia kultura, October 25, 1988, where Foreign Ministry spokesman Gnady Garasimov defended the publication of such stories. Incidentally, the last one was picked up by about 50 different publications throughout the world.

Now, these deliberate falsehoods are approved by the Central Committee apparatus, that is, its ideology department, for dissemination. The espionage effort also continues. Only 12 days ago, CIA Director William Webster was interviewed at a breakfast meeting by newspaper journalists here in this country, and he stated, I quote, "We find them, the KGB and GRU, everywhere. There has been no pulling back on intelligence collection in this country and other parts of the world."

Over the past 5 years, the United States Government has prosecuted about 15 major spy cases involving American citizens who have been aiding the U.S.S.R. Now, let me just mention one case, and this does not involve Americans, it involves our allies, the Japanese and the Norwegians, the Toshiba-Kongsberg case, where, for a mere $29 million, the Soviets has achieved what it will take the United States more than $1 billion in research and development money to recoup.

Now, other disquieting news involves the state of the U.S.S.R. Armed forces. Discrepancies between figures on conventional military balance in Central Europe released by NATO, this was in the end of January, I mean, November 1988, and the Warsaw Treaty Organization, the end of January 1989. I think this should be recognized as evidence that the East continues to play the same charade it did over a period of 15 years and 3 months at the MBFR talks in Vienna, Austria. This does not auger well for the new negotiations on conventional armed forces in Europe, which started last month.

Now, the declaratory policy to the effect that the U.S.S.R. intends to maintain only sufficient troops to repel and attack has been widely interpreted to imply major cutbacks. And, indeed, Mr. Gorbachev announced in his U.N. speech last December the unilateral withdrawal of men and tanks from Eastern Europe over the next 2 years. However, on the basis of a table, which I have attached to my testimony entitled, "Soviet Military Production, 1986–88," it would be a mistake to assume that sufficiency rules out the perceived necessity by the Soviets for an increase in almost all of the 22 weapon systems listed there as of December 20, 1988. These are figures for the years 1986, 1987, 1988, and in the majority of cases, there is an increase in production. The source is the Defense Intelligence Agency and it appears in volume 13 of the Joint Economic Committee of Congress, which appeared just last week.

Now, indeed, this represents a problem for all aspects of U.S.S.R. foreign policy, despite the desire in the West to interpret perestroika and glasnost as we would like to see them operate in practice. For this reason, it also seems to me, Mr. Chairman, we must proceed cautiously when it comes to foreign trade with the Soviet Union. The latter proclaims its needs for a share in the world's advanced technology. The bottom line is whether the United States should help in this process along our traditional approach of unre-

stricted generosity, in the hope of buying, in effect, the good will of the U.S.S.R.

Moscow's agenda is clear; it needs food, high-technology, and hard currency to resolve economic problems. It will require credits, loans, and market opportunities in order to emerge as an economic superpower. In conclusion, Mr. Chairman, I believe that ideology will continue to play a significant role in Soviet foreign policy. Mr. Gorbachev has proclaimed a return to peaceful coexistence, as practiced by Lenin during the early 1920's. The founder of the first Marxist state was a true believer, as is Mr. Gorbachev today. If he strays from the narrow line, obviously, Mrs. Raisa Gorbachev is there, as a former lecturer of Marxism-Leninism at Moscow State University.

Now, the fact that Mr. Gorbachev selected such a dogmatic ideolog as Iakovlev to be his closest adviser on foreign policy would seem to support my contention. And I quote, "The ideological antagonism between capitalism and socialism," to quote Iakovlev, "is manifested in the continuation of active measures against the United States."

The war-fighting and war-survival posture still remains a part of U.S.S.R. military doctrine; if it were otherwise, why does Mr. Gorbachev not begin to dismantle his strategic offensive nuclear forces, which are capable of destroying more than 90 percent of all American land-based ICBM's in their prelaunch configuration. The Soviets have little to lose and, yet, much to gain in public relations by announcing a 10-percent cut from their more than 5 million men under arms.

What can the United States do to reestablish normal relations with the U.S.S.R.? It seems to me that we might learn from Beijing, which did set three preconditions for normalizing government-to-government—not party-to-party, incidentally—contacts with the other Communist power. Almost 30 years after the dispute arose, a Soviet leader will come to China for a summit the middle of May. Of course, there is no question of Chinese aid to the Soviet Union.

Now, our Secretary of State could make it clear to Mr. Shevardnadze when they meet in Moscow also next month, that will not tolerate the continuing active measures campaign, violations of arms control treaties—here I refer to the President's unclassified report to Congress, dated December 2, 1988—and the massive $1 billion per year economic and military assistance to Nicaragua, and the same tactics at the CFE talks in Vienna, which stymied NBFR for a decade and a half. A warning that START negotiations will remain in recess until the Soviet Union begins to act like a civilized member of the world community just might bring surprising results. Thank you, Mr. Chairman.

[The prepared statement and accompanying article of Dr. Staar follows:]

PREPARED STATEMENT OF RICHARD F. STAAR

The fourth anniversary of the "new era" passed almost unnoticed on 11 March 1989. In the United States, a president's term of office would have been over and a balance sheet of gains/losses drawn up. Not so in the USSR. When Mikhail S. Gorbachev was nominated to an unlimited number of years as CPSU general secretary by fellow politburocrat Andrei A. Gromyko, the latter described him as follows: "Comrade Gorbachev has a nice smile but iron teeth." Gorbachev has displayed his congenial smile indeed on television, especially in the West; he has shown his iron teeth by ousting aged leaders like Gromyko who might have opposed the "new political thinking" in foreign affairs.

In 1986, less than one year into the "new era," the 27th CPSU Congress adopted the latest party program (previous ones had been announced in 1903, 1919, and 1961) which probably will remain in force well into the next century. This document spells out the following general foreign policy objectives:[1]

1. cooperation with all member [communist-party ruled] states of the world socialist system;
2. strengthening relations with [Third World] liberated countries;
3. maintenance of peaceful coexistence and striving for disarmament with capitalist governments; [and]

4. supporting proletarian internationalism within the world workers' and communist movement.

However, as soon as this document was adopted, Gorbachev began to ignore it. The reason is not absolutely clear. Perhaps Gorbachev has sought to pursue old objectives, without the burden of hackneyed foundations, or perhaps he has been attempting to avoid certain ideological constraints. We do not know, of course, whether Mrs. Raisa Gorbacheva (a former Moscow State University lecturer on Marxism - Leninism) has any influence on her husband in this respect. At any rate, neglect of the party program does not mean the eclipse of ideology from Soviet foreign policy.

Ideology certainly does remain important, as suggested by the results of a 24 August 1988 note from Gorbachev to the politburo entitled "On the question of reorganizing the party apparatus" into six commissions.[2] These changes reaffirm and strengthen the role of ideology in foreign policy.

The new 25-member ideological commission is chaired by Vadim A. Medvedev who serves on the national CPSU secretariat as well as on the 12-man politburo. The ideology department, under the commission, has six subdivisions. The one dealing with foreign political information and international ties is responsible for "ideological activity in the international arena."[3] The elaborate structure of this commission

suggests that the Soviet leader is concerned with maintaining a basic ideological foundation in the foreign policy area.

However, this apparatus projects abroad what Gorbachev has designated the "new political thinking," namely a call for global interdependence that supposedly transcends class interests. Humanity's problems are shared by the entire world. In his speech before the U.N. General Assembly on 7 December 1988, for example, the Soviet leader mentioned the environment more than 20 times and compared ecological destruction with what would happen during a major war.[4] The prescription for saving the world from a nuclear holocaust involves coalitions between peace-loving and socially responsible forces against reactionaries and capitalist profiteers. This, of course, is traditional Soviet Foreign Policy.

Paradoxically, the non-traditional element is masked by the talk about returning to Leninism, albeit narrowly defined. Lenin explicitly based his interpretation of international events on class interests, openly held to a world outlook that included a struggle to the death between capitalism and "socialism," and used the term peredyshka (breathing space) to explain unambiguously his temporary policy of "peaceful coexistence." Even though they were economically and militarily weak at this time, the Bolsheviks openly announced their convictions. Unlike today, they did not hide their long-range

objectives behind a façade of glasnost'. By contrast, Gorbachev's "new thinking" is at least a rhetorical retreat. To quote from a recent congressional study,

> "...Gorbachev has modified the concept of peaceful coexistence: downgrading the traditional concepts of struggle, contention, confrontation in an irrepressible conflict with capitalism; emphasizing the positive value of political solutions through diplomacy and negotiations; acknowledging the rightful interests of other states; and shifting stress from seeking a balance of power to a balance of interests."[5]

"New thinking" to the contrary, in a speech delivered on 17 April 1987, politburo member and national secretary Aleksandr N. Iakovlev (the man with the most influence on both foreign policy and ideology) warned that "the concept of an inter-related world and the need for the cooperation of all humanity does not reduce by one iota the problems of ideological antagonism between socialism and communism."[6] So apparently the new line amounts to struggle under the banner of a joint East-West endeavor.

Gorbachev, thus, is faced with the problem of reconciling Leninism

and the "new political thinking." It is precarious to operate in the real world on the basis of (1) an ideology, grounded in the idea of the class struggle and, at the same time, of (2) a theory of global interdependence that supposedly transcends class interests.[7] Gorbachev's opponents can always charge him with duplicity. One way of squaring the circle is to look upon the "new thinking" as a methodology for structuring international affairs, a way of relating the old to the new, and not consider it a doctrine at all.[8] This is possible only if accepted by the United States on the one side and a majority of politburo members on the other.

II

Setting ideology aside, it should be noted that Gorbachev's two key foreign policy advisers disagreed pragmatically on which geopolitical areas to emphasize after the 27th Party Congress. Anatolii F. Dobrynin (secretary in charge of foreign affairs), career diplomat and ambassador to Washington, D.C., for almost a quarter century, urged that superpower relations be accorded the highest priority. The above quoted Iakovlev (secretary for propaganda) publicly advised a downgrading of emphasis on the United States and the adoption of a "borderlands" strategy, i.e., concentrating on Western Europe, China, Japan, India and other areas in close proximity

to the USSR. Both approaches in fact were adopted, since there would be no conflict between them in the short run.

During 1986 and 1987, Dobrynin appeared in the ascendancy, after being called back from the United States to become a CPSU secretary and chief of the international department in the central party apparatus. During the restructuring which was announced on 30 September 1988, however, he lost both positions and only later reappeared as one of the advisers to Gorbachev in the latter's capacity as titular president (presidium chairman on the Supreme Soviet) of the USSR. Dobrynin's primary function may be to provide a different opinion, if asked, from the newly emerging Iakovlev as de facto deputy to the CPSU general secretary.

Four years younger than Dobrynin, Iakovlev has worked in the CPSU as a full-time functionary since age 23. His diplomatic experience is limited to ten years as ambassador to Ottawa. Since returning from this Canadian "exile" in 1983, he has directed the prestigious Institute of the World Economy and International Relations (IMEMO), the CPSU propaganda department and, over the past three years, successively became a national secretary, politburo member, and chairman of the new commission on questions of international policy. Although he spent 1959 as an exchange student at Columbia University, he is known for harsh anti-American views.[9]

Some indication of Iakovlev's attitude toward the United States can be seen from the following quotation that appeared in one of his recent books, entitled On the Edge of the Abyss:

> Reality is such that we must deal with a country [the U.S.] where freedom is suppressed, where violence flourishes, where trade unions are persecuted, where the press serves Big Business and where the basic rights of the individual are hampered: the right to work, the right to live, the right to get objective information, the right to have materially guaranteed access to true culture and the right to personal security. This is a nation in which militarism and war are the basic means of achieving foreign-policy goals.[10]

These views are held by the individual almost directly responsible for how the USSR will plan its strategy vis-à-vis the United States. Since they obviously do not flow from reality, they must come from ideology.

The 21 members of Iakovlev's international policy commission include two directors of major institutes (G.A. Arbatov, USA and Canada; Ye. M. Primakov, IMEMO), the chief of the General Staff, a vice president of the USSR Academy of Sciences (Ye. P. Velikhov), a

first deputy and one deputy foreign minister, the KGB chairman, the editor of Izvestiia, the chief of the international department in the Central Committee apparatus (V. M. Falin), the first woman cosmonaut (V. V. Tereshkova), an aide to the CPSU general secretary (A. S. Cherniaiev), but no Dobrynin.[11] It should be noted that many of the above individuals have appeared as official spokespersons for the Soviet government in the West.

Of particular interest is Georgii A. Arbatov, a journalist by training and profession, who directs the Institute for the Study of the USA and Canada in Moscow. He has been described by former secretary of state, Henry Kissinger, as follows:

> Arbatov was a faithful expounder of the Kremlin line, whom I had met at various international conferences on arms control when I was still a professor. He knew much about America and was skillful in adjusting his arguments to the prevailing fashions. He was especially subtle in playing to the inexhaustible masochism of American intellectuals who took it as an article of faith that every difficulty in U.S.-Soviet relations had to be caused by American stupidity or intransigence. He was endlessly ingenious in

> demonstrating how American rebuffs were frustrating the peaceful, sensitive leaders in the Kremlin, who were being driven reluctantly by our inflexibility into conflicts that offended their inherently gentle natures.[12]

Although Arbatov may lack the influence Dr. Kissinger has attributed to him, he undoubtedly remains useful to the Commission as a propagandist of considerable talent.

The most important unit under Iakovlev's commission is the international department under Dobrynin's successor, Valentin M. Falin. His responsibilities include relations with the non-ruling communist and "progressive" parties throughout the world as well as with national liberation movements, international front organizations, friendship societies, clandestine radio stations, and foreign policy related institutes. A separate department under Iakovlev's commission deals with bloc relations, i.e., communications between the CPSU and other ruling communist parties elsewhere.[13] These units represent the working level of the foreign affairs apparatus and are much more important than those in the USSR Ministry of Foreign Affairs in terms of overall strategic policy-making.

III

Gorbachev laid out a blueprint for the "new political thinking" in his international best selling book Perestroika: New Thinking for Our Country and the World, translated into some 40 foreign languages. Chapter 3 discusses what he argues is the basic principle of the contemporary world from which flows the new political thinking: "nuclear war may not be used as a means for achieving political, economic, ideological or any other objectives."[14] How does he reconcile this principle with the traditional Soviet premise of a fight to the finish between opposing social systems?

Gorbachev reduces that premise to Khrushchev's famous statement, "We will bury you" (my vas zakopaem), and then explains this in terms of the debate among agronomists in the USSR during the late 1920's and early 1930's which supposedly had been called a discussion about "who will bury whom." In any event, Gorbachev assures us in his book that the above phrase was not properly understood in the West and that, in any case, it should not be taken literally or applied to all situations.

He ends this chapter by calling for a dialogue with the West as well as for an honest and open foreign policy. Utilizing the channels of public diplomacy, the Soviet Union will strive to make its positions clear to the whole world. It is obvious from this that the

USSR, if necessary, will appeal to the people over the heads of their governments. Finally, Gorbachev states that the old Western inertia (by definition, the ideology of the West) is presently stronger than the new political thinking, although he believes that this situation will change. Indeed, he claims that the future of the world depends on such a transformation.

Assuming that the "new political thinking" will continue to be implemented by the USSR through such "instruments as diplomacy, force [the military], propaganda, and economic rewards or punishments [foreign trade],"[15] how have some of these instruments been applied during the recent past? Let us begin with foreign propaganda, first.

A recent director for European and Soviet affairs on the U.S. National Security Council staff has suggested that one of the main objectives of the USSR propaganda campaign includes erosion of the belief that Moscow pursues adversarial goals and projection of a world order that blurs East-West distinctions.[16] Gorbachev's address at the United Nations in December of 1988, cited above, represents a masterpiece example of the foregoing. Iakovlev's commission on questions of international policy includes supervision over foreign propaganda and, thus, undoubtedly had a hand in drafting the speech which was a public declaration to the world on the "new" Soviet foreign policy. While drafting this speech, however, Iakovlev's

commission has continued to spread disinformation about the United States. It is impossible to avoid the conclusion that Gorbachev's speech and the disinformation campaigns together form a coherent whole in the minds of their authors.

One aspect of this coherent whole is Radio Peace and Progress, an "unofficial" transmitter, established in 1964, using the same broadcasting facilities as Radio Moscow. RPP can be and some times is disavowed by the Soviet government. During the fall of 1988, RPP claimed that both Iran and Iraq "now realize that imperialist U.S. circles are their common enemy."[17] Unmentioned, of course, was the fact that the USSR supplied weapons to Iraq and East European regimes did the same for Iran during the war between those two countries. One might add that the clandestine "National Voice of Iran" which had transmitted in Farsi, Kurdish, and Azerbaijani from Baku between 1959 and 1986 has been taken over by RPP with identical radio frequencies and the same announcers.[18] Much of the disinformation, however, comes openly from official Soviet organs.

During the early December 1987 summit meeting in Washington, D.C., at which time the INF treaty was signed, Gorbachev promised USIA Director Charles Z. Wick that there would be "no more lying" and "no more disinformation." Since that time, however, Soviet government media have made the following false allegations:[19]

- The FBI assassinated Martin Luther King, Jr. (Literaturnaia gazeta, 20 January 1988).
- The U.S. is manufacturing an "ethnic weapon" that kills only non-whites (Novosti Military Bulletin, January 1988; TASS, 9 January 1988; Moscow radio, 5 February 1988).
- The CIA played a part in the assassinations of Prime Minister Olof Palme of Sweden as well as Prime Minister Indira Gandhi of India, and attempted to kill Pope John Paul II (Moscow radio, 5 February 1988).
- The U.S. manufactured the AIDS virus in a military facility at Fort Detrick, Maryland (Moscow radio, 13 February 1988).
- U.S. citizens purchase Latin American babies to obtain their organs for transplants (TASS, August 1988). This disinformation was picked up and published in some 50 countries.

Gorbachev's "new thinking" has not curtailed and will not curtail these "active measures." Nor has "new thinking" been inconsistent with accelerated espionage and the theft of high technology.[20] Hence, it is logical to conclude that the "new political thinking" actually is best

seen as a political offensive. This is particularly significant, since the Soviet military looks more ominous than ever.

IV

The promise to adopt a strictly "defensive" military doctrine came even earlier than Gorbachev's pledge to abandon disinformation. After the 28-29 May 1987 session in East Berlin, the political consultative committee of the Warsaw Treaty Organization (WTO) issued a separate declaration pledging not to begin hostilities unless attacked and also pledging not to use nuclear weapons first. The document specifically promises that the East will respect the independence and territorial integrity of other states and not interfere with their internal affairs. Finally, WTO members admit to existing imbalances and asymmetries in certain unspecified armaments and troop categories.[21]

Despite this admission, nothing of consequence really happened during the rest of 1987 or all of calendar year 1988 either in Soviet military deployments or at the Mutual and Balanced Force Reduction (MBFR) negotiations in the Redutensaal of the Hofburg at Vienna, Austria, which had begun as NATO-Warsaw Pact talks back in October 1973. Does this mean that the East had perpetrated yet another public relations hoax? Reports suggested that the Soviet Union wanted to close down MBFR and establish a new forum that would include all of the countries, including neutrals, between the Atlantic and the Urals.

This would happen only if the Conference on Security and Cooperation in Europe (CSCE) follow-on session ended to the USSR's satisfaction. Discussions, in the meanwhile, began on a replacement for MBFR and dragged on from 17 February 1987 to 10 January 1989 just to agree on the objectives for the new talks.

A month before those talks ended, Gorbachev gave his speech before the UN General Assembly. It included an announcement that 500,000 (total ca. 5.8 million) Soviet troops would be unilaterally demobilized and 10,000 (total 59,470) tanks withdrawn from the active inventory over the following two years, i.e., 1989 and 1990. It is not known at this time what kind of tanks, the obsolescent T-54 (now in Afghanistan and elsewhere) or the latest T-80 or perhaps some in between models, will be withdrawn. This was followed by an article reflecting USSR defense ministry figures on specific reductions also to be carried out by other pact members.[22]

Only one country, namely Romania, failed to follow the Soviet example, because of a five percent unilateral cut in its military budget and armed forces back in 1986. Later the USSR announced that 5,000 tanks would be withdrawn from Eastern Europe--one tank regiment from each armored division, replaced by a motorized infantry regiment. But that is a doubtful blessing, since modern tank doctrines call for a heavier mix of infantry to deal with anti-tank weapons.

On the discrepancy between statements and action, it is worth quoting the then-U.S. Secretary of Defense, Frank C. Carlucci. He addressed the Voroshilov Military Academy of the USSR Armed Forces in Moscow on 1 August 1988 (14 months after the Warsaw Pact document on defensive strategy had been issued) and said the following:

> First, we have difficulty in reconciling a defensive doctrine with what we see in Soviet force structure and operational strategy as an emphasis on the offensive [emphasis in the original] — especially on surprise and maneuver. I refer to such things as the operational maneuver group concept, forward based bridging units, and the heavy emphasis on tanks and artillery. At the same time, we see no shift of emphasis to the kind of forces typically associated with defense.[23]

Secretary Carlucci went on to say that the signs observed from Soviet military exercises were ambiguous and that it would be difficult to differentiate between offensive forces initiating an attack and those prepared to launch a counteroffensive.

Also disturbing were the six tables of figures, released by the Warsaw Pact committee of defense ministers, which allegedly compared the Eastern and Western alliance systems. They differ from data that

had been published two months earlier by NATO.[24] The two sets of figures are compared in Table 1. In an interview with TASS, one of the deputy chiefs of a directorate in the USSR armed forces General Staff (Major General Iuri Lebedev) accused the West of excluding figures on warships and some of the air forces from its announcement. Subsequently WTO defense ministers described the NATO data as tendentious, "based on a selective approach."[25] Hardly an auspicious prelude to the negotiations on Conventional Armed Forces in Europe (CFE) which opened on 9 March 1989 in Vienna. These talks also include the subject of mutual confidence and security building measures.

What proves most disconcerting, in the midst of Soviet rhetoric about military budget cuts and conversion of defense industries from production of weapons to consumers' goods, are the figures shown in Table 2.[26] These data indicate that the USSR has not only maintained identical production levels during 1988 as compared with 1986 in most categories of weapons systems but, in many cases, has exceeded them.

The propagation of the "new political thinking" in the West has led to drastic cuts in military brudgets and especially the procurement of new weapons systems. This has made each new Soviet weapon even more "cost effective" than it would otherwise have been. Hence, it is impossible to avoid the conclusion that the "correlation

of forces" is shifting eastward at a faster pace than ever before. Of course this raises the question of how long such a process can be continued, given the state of the Soviet economy.

V

The final issue to consider here is the use of trade as an instrument of foreign policy. Khrushchev once explained to a group of visiting U.S. senators: "We value trade least for economic reasons and most for political reasons..."[27] Historically, the Soviets have limited or cut off commercial exchange in order to penalize certain governments. Examples include the total embargo against Yugoslavia (1949), the drastic cut back with China (1965), and the temporary stoppage of oil deliveries to Romania (1980). If this happens with communist-ruled countries, the West should be forewarned that it can be done to other countries as well.[28] The two past examples which come to mind are the attempt to pressure Iceland against joining NATO (1948) and the boycott of Australian wool (1954).

East-West exchange during calendar year 1988 amounted to only 25 percent of the USSR total.[29] A decade earlier, at the height of detente, the United States ranked third (after West Germany and Japan) among the best Soviet trading partners, in part due to large American exports of agricultural products. During this past year, the Soviet

target of 195 million tons was 19 percent or 38 million tons of grain short, and the USSR imported 36 million tons from the U.S., Argentina, Australia and Canada.[30] Although the United States' share is sizeable, with subsidized sales of about 15 million tons to the Soviet Union during 1988, it still does not provide our government with sufficient political leverage in this respect.

In order to finance such large purchases of grain, both the USSR and certain among the East European states have engaged in "dumping" low-priced items and services in Western Europe. The Federal Republic of Germany has accused Hungary, Poland and Yugoslavia of offering pharmaceuticals at discounts down to almost half of production cost. The Soviet merchant marine (Morflot) earns hard currency as a third-flag carrier and has undercut Liner Conference rates by up to 40 percent. As a result, three U.S. shipping companies (Pacific, Far East, and United States lines) have been driven out of business.[31]

Despite such practices, the Soviet Union had been able to obtain more than $50 billion worth of high technology from the West during the 1970's. The sale of 164 miniature precision ball-bearing machines enabled the USSR to develop heavy multi-warhead ICBM's at a more rapid rate than would otherwise have been possible. Military trucks used in Afghanistan were produced by the supposedly civilian Kama River plant, built with $1.5 billion worth of Western technology. The automated

foundry, engines, production line, and computer system all came from the United States. Two large American floating docks are being used to repair Soviet warships at Cam Ranh Bay, Vietnam. In all cases, the U.S. received assurances that none of the output from this equipment or technology would be turned over to the USSR armed forces.[32]

Before the end of 1979, it had become clear that Soviet military capabilities were being improved by legally imported technology from the West. Despite the efforts of CoCom (Coordinating Committee on Multilateral Export Controls), which includes Japan and all NATO members except Iceland, there has been leakage of high technology to the East. USSR countermeasures against CoCom have been directed at circumventing restrictions by means of an elaborate organization that works through clandestine channels. One of these is KGB Directorate "T" (technology), documentation about which was obtained by the French intelligence service.[33]

In addition a copy of a secret acquisitions manual, called Das Rote Buch because of its covers, fell into the hands of the West German government. It has 27 chapters, suggesting the extent of Moscow's high technology "shopping list."[34] Twelve key Soviet defense manufacturing ministries provide the desiderata for specific collection requirements. These are submitted to the Military-Industrial Commission or VPK (Voenno-promyshlennaia

Kommissiia) which uses the KGB and GRU, among other channels, to obtain one-of-a-kind military and dual-use hardware, blueprints, product samples, and test equipment.[35]

A recent acquisitions operation under this program was frustrated by U.S. Customs Service agents in Miami, when they arrested four citizens of the Netherlands. These men were attempting to smuggle a $1.5 million Vax 8800 computer, which had been modified for 50-cycle electric current in the Soviet bloc. This equipment can be utilized for operation of ballistic missiles and radar installations.[36] The current U.S. Treasury Department list of most wanted high-tech smugglers includes West German, Swiss, British, Austrian, and American citizens.

A second program to obtain modern high-technology comes under the USSR Ministry of Foreign Economic Relations. Microelectronics, computers, communications, machinery, robotics, diagnostic and other export-controlled equipment are sought to increase the efficiency of Soviet weapon-producing industries. During the 10th Five-Year Plan, e.g., some 3,500 requirements, submitted by the twelve ministries mentioned above, could be met successfully. However, only one-third of all VPK assignments were fulfilled completely or in part each year which suggests that Western efforts to prevent illegal high-tech transfer have had some effect.[37]

A recent example of a significant, if not disasterous, trade diversion involved two prominent Japanese and Norwegian firms. Both countries belong to CoCom. Toshiba Machine Company secretly installed computer-controlled equipment to produce quietly revolving propeller blades for Soviet nuclear submarines at the Leningrad shipyard. The Kongsberg Vaapenfabrik supplied the software. The contract even included a five-year service agreement.[38] A mere $29 million gave the Soviets a military advantage which complicates submarine tracking for the U.S. Navy.

The Foreign Economic Relations Ministry operates literally hundreds of trade companies throughout the world. During the early 1980's, some fifteen percent of all VPK assignments and nine percent of the "most critical" ones were satisfied with the help of Ministry officials. They also collected almost one-third of all samples.[39]

Not content with trade diversion and theft, the USSR apparently hopes for a direct transfusion of high technology on a massive scale. Western government leaders seem willing, even enthusiastic, about accommodating Gorbachev. During the last three months of 1988, high-ranking officials from the United Kingdom, France, the Federal Republic of Germany, Italy, Japan, and others travelled to Moscow with offers of loans that totaled some $12.2 billion, much in untied

credits. The USSR hard currency debt by mid-February 1989 had already risen to about $41 billion.[40]

In sum, the Soviet agenda with regard to foreign trade is obvious: acquire (on credit at concessionary rates or through Eastern Europe at subsidized rates) the food, high technology, and hard currency that the USSR economy cannot produce and that is essential to provide the population with a minimal diet, the military with advanced weapons, and the Soviet empire with hard cash. The Western agenda is much more nebulous. The only thing clear about it is that taxpayers in the West pay now and hope for developments later over which no one has any control. This may or may not be strictly "Leninism," but it makes sense from the Soviet point of view.

VI

In conclusion it seems that ideology—including the practical hybrid called "new thinking"—will continue to play an important role in Soviet foreign policy. Despite the fact that the "socialist commonwealth of nations" has only 16 party-states as members, the approximately 80 communist parties in other countries comprise a potent reservoir of support for Soviet policies. The so-called national liberation movements throughout the Third World are also considered allies in the struggle against the "imperialist" camp

headed by the United States. So long as USSR military power "covers" them, Soviet (Western-supplied) cash keeps flowing, and political pressure from Moscow prevents effective aid to their opponents, members of the world socialist system will remain as assets.

Gorbachev has sought to reassure the world by announcing a return to the "peaceful coexistence" of the early 1920's under Lenin. It is doubtful, however, that the founder of the Soviet totalitarian state would have continued this policy beyond the peredyshka or "breathing space" necessary for economic recovery, even if he had continued to live after 1924. Lenin was a true believer in Marxism and the ultimate victory of the socialist world, as is Gorbachev today. The fact that the dogmatic Iakovlev is his principal advisor on foreign policy seems to reinforce this conclusion.

The "ideological antagonism between capitalism and socialism," to quote Iakovlev, is manifested in the continuing use of hostile propaganda against the United States. Perhaps the most potentially damaging tactic is the use of forged documents. Prepared by the KGB, they are attributed to U.S. government agencies not only with the intention of discrediting America in the eyes of the Third World but also of splitting the NATO alliance. Clandestine radio stations, as mentioned above, broadcasting false allegations from Eastern Europe and the Soviet Union fulfill the same purpose. Using measures

traditionally associated with warfare, the Soviet government continues to interfere with American foreign policy objectives while publicly proclaiming the end of such hostilities.

A war-fighting and war-survival posture has characterized USSR military doctrine from its origins. Indeed, deployment of superior strategic offensive forces has already given Moscow the capability of destroying more than 90 percent of all U.S. land-based intercontinental ballistic missiles in their pre-launch configuration. Consequently, the Soviets have little to lose by announcing a less than 10 percent cut over the next two years in conventional forces. After 15 years and three months of inconclusive MBFR talks at Vienna, does anyone realistically expect the new negotiations on conventional armed forces in Europe (CFE) to produce significant results?

The Soviet's weak point, however, is their need for foreign trade, credits, and advanced technology from the West, especially the United States. To gain access to world markets and build acceptance as a reliable partner in international business transactions, the USSR hopes to offer the "carrot" of good behavior to countries reluctant to welcome it into the global business community. The desire of U.S. allies to tap into Soviet natural resources and a starved domestic market may well exacerbate tensions in NATO and with Japan. In this

way, the Soviets threaten both the political as well as the economic stability of the West.

What then can the United States do, if it wants to maintain "normal" relations with the USSR and at the same time protect itself from whatever ultimate fate Moscow might have in store for us? We can learn from the regime in Beijing which set out three preconditions for normalizing government-to-government relations with the other communist superpower: (1) a substantial reduction in the estimated two million Soviet troops deployed along Chinese borders; (2) withdrawal of all USSR armed forces from Afghanistan; and (3) evacuation of the Vietnamese occupation army from Cambodia. The Chinese held out for almost 30 years, and Gorbachev will come to Beijing for a summit meeting the middle of May. Of course, there is no question of Chinese aid to the Soviet Union.

Unfortunately, the United States does not have that kind of illusion-free statesmanship. Our secretary of state could make it clear to his counterpart when they meet in Moscow next month that we will not tolerate the continuing active measures campaign, violations of arms control treaties, intensification of espionage, the massive $1 billion per year economic and military assistance to Nicaragua, and the same tactics at the CFE talks that had stymied MBFR. A warning that negotiations on a treaty for strategic arms reductions will

remain in recess, until the USSR begins to act like a civilized member of the world community, might bring surprising results.

But such words would have to be backed up by resolve to maintain U.S. armed forces capable of actually fighting the USSR if necessary, resolve to cut off Western subsidies through secondary boycotts and, most of all, resolve to call the Soviet colonial empire by its rightful name.

My final suggestion, Mr. Chairman, is that our United States government take some lessons from the Chinese: see the "new political thinking" for what it really is, make clear our position on negotiable points and situations, and let the Soviets (eager to accommodate the West in the hope of rescuing their economy), make truly concilliatory moves before we decide to change our stance, and certainly before we decide to support Gorbachev's "new era."

Table 1

THE BALANCE OF FORCES IN EUROPE

WARSAW PACT FORCES		NATO FORCES	
Warsaw Pact estimate	NATO estimate	Warsaw Pact estimate	NATO estimate
Men under arms			
3,573,100*	3,090,000	3,660,200	2,213,593
Tanks			
59,470	51,500	30,690	16,424
Armored Personnel Carriers			
70,330	71,000	46,900	35,351
Helicopters			
2,785**	3,700	5,270	2,419
Combat Aircraft			
7,876***	8,250	7,130	3,977

*Includes navy personnel.
**Includes navy helicopters.
***Includes naval aircraft.

Sources: NATO, Conventional Forces in Europe: The Facts (Brussels: November 1988), pp. 34; Statement by the Committee of the Ministers of Defence of the Warsaw Treaty Member States (East Berlin: Panorama DDR, 1989), pp. 15.

Table 2

Soviet Military Production, 1986–88

	1986[1]	1987	1988
Ground Force			
Tanks	3,300	3,500	3,500
Other Armored Fighting Vehicles	3,700	4,050	4,550
Towed Field Artillery	1,100	900	1,100
Self-propelled Field Artillery	900	900	1,100
Multiple Rocket Launchers	500	450	500
Self-propelled AAA	100	100	100
Towed AAA	0	0	0
Missiles			
ICBM's	75	125	150
LRINF	25	75	50
SRBM's	600	500	450
SLCM's	1,100	1,100	1,100
SLBM's	100	100	100
Aircraft			
Bombers	50	45	45
Fighters/Fighter-Bombers	650	700	700
Transports	200	175	150
ASW	5	5	5
Military Helicopters	500	450	400
Utility/Trainers	45	10	10
Naval Ships			
Submarines	8	9	9
Surface Warships[2]	9	8	10
Other Surfaced Combatants[3]	60	55	51
Auxiliaries	6	7	7

[1]Some 1986 figures revised to reflect current total production information.

[2]Includes aircraft carriers, cruisers, destroyers, frigates, and corvettes.

[3]Includes patrol combatants, coastal patrol craft, and mine warfare and amphibious warfare ships and craft.

Source: U.S. Congress, Joint Economic Committee, Hearings (Washington, D.C.: 1989), Part 13, pp. 111-112.

Notes

1. Programma KPSS: novaia redaktsiia (Moscow: Politizdat, 1988), pp. 60–74, elaborates on these points.

   This document is the product of an earlier period, with its traditional slogans, although it does avoid the utopian formulations of the immediately preceding party platform prepared under Nikita S. Khrushchev.
2. Interview with A. S. Kapto, chief of the ideology department, in Pravda, 20 February 1988, p. 2.
3. Membership on all six commissions received Central Committee approval and appeared listed in Pravda, 29 November 1988, pp. 1–2.
4. M. S. Gorbachev's speech at the UNGA was published in full by Vestnik Ministerstva Inostrannykh Del SSSR, No. 24 (31 December 1988), pp. 1–8; Moscow.
5. U.S. Congress, House Committee on Foreign Affairs, Soviet Diplomacy and Negotiating Behavior: 1979–88 (Washington, D.C.: U.S. Government Printing Office, August 1988), vol. II, p. 637.
6. Quoted in ibid., p. 640.
7. I owe this formulation to R. Judson Mitchell, especially in Chapter 10 of his manuscript entitled "Soviet Political Leadership from Brezhnev to Khrushchev."
8. Gerhard Wettig, Soviet Foreign Policy Under Gorbachev (London: Institute for European Defense and Strategic Studies, 1988), p. 37; London.
9. Alexander G. Rahr (comp.), A Biographic Directory of 100 Leading Soviet Officials (Munich: RFE/RL, October 1988), 4th ed., pp. 223–225.
10. Aleksandr N. Iakovlev, Ot Trumena do Reigana (Moscow: Molodaia gvardiia, 1984), p. 399; translated under the title, On the Edge of an Abyss (Moscow: Progress Publishers, 1985), p. 400.
11. Pravda, 29 November 1988, p. 2.
12. Henry Kissinger, White House Years (Boston: Little, Brown & Co., 1979), p. 112.
13. Chart, "Moscow's Evolving Active Measures Apparatus,"

Disinformation (Winter 1989), No. 11, pp. 10-12. Central Intelligence Agency, Directory of Soviet Officials: National Organizations (Washington, D.C.: Directorate of Intelligence, February 1989), LDA 89-10149, pp. 7-8.

It should be noted that for the first time relations between the CPSU and ruling communist parties are being handled by the same authority that governs relations with non-ruling parties. This is a major change, the meaning of which remains unclear.

14. M. S. Gorbachev, Perestroika i novoe myshlenie (Moscow: Politizdat, 1987), pp. 137-165, at p. 143.
15. Philip G. Roeder, Soviet Political Dynamics (New York: Harper & Row, 1988), p. 407.
16. John Lenczowski, "Soviet Propaganda and Active Measures: 1988," Disinformation (Winter 1988), No. 8, p. 10.
17. Cited by U. S. Information Agency, Office of Research, Soviet Propaganda Trends, No. 41 (27 October 1988), p. 6.
18. The Economist, Foreign Report, No. 1948 (11 December 1986); London.
19. U. S. Information Agency, "Soviet Active Measures in an Age of Glasnost," Report to Congress (Washington, D.C.: Office of Research, March 1988), pp. 2-3 and 7. The last item is from Disinformation (Winter 1989), no. 11, p. 3.
20. Richard F. Staar, The "High Tech Transfer Offensive of the Soviet Union," Strategic Review (Spring 1989), vol. XVII, no. 2.
21. John J. Karch, "Warsaw Treaty Organization," in R. F. Staar (ed.), 1988 Yearbook on International Communist Affairs (Stanford, CA.: Hoover Institution Press, 1988), pp. 375-376. For the document itself, see "Concerning Military Doctrine," Krasnaia zvezda, 30 May 1987, p. 1; Moscow.
22. Argumenty i fakty, No. 6 (11-17 February 1989), p. 8; Moscow. The USSR Supreme Soviet did not issue an implementing decree until the following month over Radio Moscow, 21 March 1989; FBIS-SOV-89-053 (same date), p. 1.
23. The Honorable Frank C. Carlucci, Secretary of Defense, "Prospects for the U.S.--Soviet Dialogue," Press Release, No. 381-88 (1 August 1988), p. 3; Washington, D.C.

24. NATO, Conventional Forces in Europe: The Facts (Brussels: Information Service, November 1988), pp. 34; Pravda, 30 January 1989, p. 5.
25. Michael Dobbs, "Warsaw Pact Sees Parity with West," Washington Post, 31 January 1989, p. 21.
26. Central Intelligence Agency and Defense Intelligence Agency, "Gorbachev's Economic Program," Hearings (Washington, D.C.: Joint Economic Committee, Congress of the United States, 1989), Part 13, pp. 111-112.
27. Quoted in the New York Times, 16 September 1955, p. 48. Emphasis added.
28. Richard F. Staar, USSR Foreign Policies After Detente (Stanford, CA.: Hoover Institution Press, 1987), revised edition, pp. 132-133.
29. Vneshniaia torgovlia, no. 3 (March 1989); insert.
30. TASS report from Moscow (21 January 1989).
31. Curtis Cate, ed., The Challenge of Soviet Shipping (New York: National Strategy Information Center, Inc., 1984), pp. 6-9.
32. [Department of Defense], Soviet Acquisition of Militarily Significant Western Technology (Washington, D.C.: The Pentagon, September 1985), p. 3; Ambassador Allan Wendt, "U.S. Export Control Policy: Its Present and Future Course," Current Policy (Washington, D.C.: Department of State, 14 June 1988), no. 1094, p. 1.
33. Thierry Wolton, Le KGB en France (Paris: Grasset, 1986), pp. 312; Philip Hanson, "Soviet Industrial Espionage," RIIA Discussion Papers (London: Royal Institute of International Affairs, 1987), pp. 39.
34. Bundesministerium des Innern, Das "Rote Buch" oder wie die UdSSR westliche Technologien beschafft(Bonn: January 1985), pp. 4.
35. Soviet Acquisition, p. 6.
36. George Volsky, "Computer Suspect Called Part of Ring," New York Times (24 December 1988), p. 6.
37. Soviet Acquisition, pp. 25-28.
38. Wall Street Journal (25 April 1988), p. 22.
39. Soviet Acquisition, pp. 20-21.
40. A. M. Rosenthal, "The Tantalizing Question," New York Times (17 February 1989), p. A-15. See also Thierry Pècles, "Le Financement par l'Occident de l'Économie Soviétique," Est & Ouest (January 1989), no. 61, pp. 3-6; Paris.

STRATEGIC REVIEW, Spring 1989
(Pre-publication copy)

THE HIGH-TECH TRANSFER OFFENSIVE OF THE SOVIET UNION

RICHARD F. STAAR

THE AUTHOR:

2
3
4
5
6
7
8
9
10
11
12

IN BRIEF

1
2
3
4
5
6
7
8
9
10
11
12

The Gorbachev regime in the USSR has made little, if any, effort to conceal the fact that a central objective of its foreign policy initiatives, labeled "new thinking," is the unimpeded flow of Western credits, goods and technology to the Soviet Bloc. The regime's salesmen of this objective advance a great many arguments as to why it is in the West's interest to extend such assistance. Some of these arguments reflect the long-standing effort to appeal to "capitalist greed," with images of the Soviet Union as a vast and largely untapped market for ultimately profitable Western investments. Yet, the principal sales-pitch, although less explicit, is cast along policy lines, suggesting in effect a *quid pro quo:* Western economic largesse in return for more accommodating Soviet behavior in the foreign policy arena.

The notion of such a *quid pro quo* — or "linkage" — has made substantial inroads in the West. Thus, the theme has become pervasive in NATO capitals that the USSR should be "rewarded" for the withdrawal of its forces from

Afghanistan. The fact that before their departure Soviet occupation troops had killed 1.5 million Afghans, crippled countless others with seismic mines, and driven 5.5 million people into exile by destroying fields and irrigation systems — and that 10,000 Soviet advisers as well as military aid continue to prop up the puppet regime in Kabul — is generally ignored.[1] Instead, it is argued that Western embargoes and other penalties imposed on the USSR after the invasion in December 1979 should now "logically" and "reasonably" be lifted. The implication is that failure to do so will invite less forthcoming Soviet actions in the future.

"Linkage" thus entails not only reward but also prepayment. A telling example of such prepayment is unfolding in the context of Gorbachev's declared intention to reduce Soviet conventional forces by 10,000 tanks and to withdraw a few armored divisions from Eastern Europe.[2] Gorbachev's gesture has scored a sweeping propaganda success, particularly in Western Europe, notwithstanding the fact that the promised reductions will affect at best marginally the USSR's overwhelming superiority in conventional forces. Indeed, the gesture has prodded both the rationale for and process of Western transfers of credits and technology to the Soviet Union — even though the promised troop withdrawals will extend over a two-year period and have not even commenced as of this writing.

The Phenomenon of "Reverse Linkage"

The late West German politician, Alois Mertes, drew the comparison of detente in the Soviet conception to a parking meter: in return for the tacit Soviet promise of essentially climatic (and revocable) changes in the international environment, the Western nations were supposed to render payments in the form of tangible concessions and hard currency to sustain that changed climate — to "keep feeding the meter."

Yet, the fundamental flaw in "linkage theory" lies not only in an asymmetry in hard concessions as against promissory notes. There is a proven contradiction in "linkage theory" in its postulation of internal dynamics of the USSR relevant to the latter's behavior in the foreign policy arena. If anything is known with confidence about the Soviet Union, it is that its economy has become less and less capable of supporting the huge weight of its military machine, and particularly the demands of that machine's modernization. Transfers of Western resources to the USSR economy, by helping it to shoulder that burden, and transfers of technology, by facilitating the modernization task, thus stand to weaken the principal Soviet incentive for "benign" behavior abroad.

This conclusion is not adduced casually: it follows from the most recent period of U.S.-Soviet detente in the 1970s. During that period, the United States sold to the USSR agricultural products, industrial equipment and high technology — all either at subsidized prices or on subsidized credit. The consequence was an increase in Soviet military power. No one should have been surprised when, during the second part of that decade, the Soviets began to assert power in ways that Western nations deemed threatening, ranging from a massive buildup of powerful intercontinental missiles aimed at the United States to an acceleration of Soviet conflict strategy into Asia, Africa and even the Western Hemisphere. Thus, the experience of the detente of the 1970s proves that there is, indeed, a linkage between the resources available to the USSR and that regime's behavior — but this linkage is essentially the reverse of that projected by Western advocates of detente strategy.

A senior official of the U.S. Department of State has admitted serious mistakes committed during the 1970s in legal sales of high technology to the USSR. He cited three U.S. decisions, each one of which was approved after Soviet assurances had been received that the transfers involved would be used only for nonmilitary purposes:[3]

- The Kama River truck plant received $1.5 billion in U.S. and other Western technology. The vehicles produced by the plant were used in the invasion of Afghanistan; others continue to support Soviet troops facing NATO in Central Europe.
- American precision-grinding machines, sold to the USSR in the 1970s, produce small ball bearings which have been integral to development of the massive force of Soviet missiles that threatens the United States today.
- Two large floating docks, sold by the United States to the USSR for ostensibly civilian use, were diverted for repair of Soviet naval vessels.

By late 1979 and the Soviet invasion of Afghanistan, it had become abundantly clear that legally imported technology from the West was enhancing and improving USSR military capabilities. The belated answer to the problem was a tightening of U.S. export controls.

The Road of Export Controls

There is a substantial body of legislation in the United States affecting the control of exports to the Soviet Bloc. It includes the 1949 Export Control Act; the 1951 Battle Act, which denied U.S. aid to governments permitting the export of strategic materials to communist-ruled countries; the 1976 Arms Export Control Act, controlling military goods and services; and the Export Administration Act (amended in 1979, 1981, 1985 and 1988), which restricts the export of "dual-use" goods that can be used both for civilian and military purposes.

In 1949 was founded the Coordinating Committee for Multilateral Export Controls, or CoCom, embracing the United States and seven West European nations. Today it has sixteen members, including Japan. A recently established Security and Technology Experts Meeting (STEM) provides independent advice to CoCom.[4] CoCom attempts to prevent the export or reexport of embargoed commodities — from nonmember countries as well — to the USSR and its East European client states. It maintains three lists of controlled items: munitions, nuclear energy related products and dual-use goods.

For its part, the USSR has devoted major resources to frustrating these restrictions. The struggle between CoCom restrictions and Soviet countermeasures has been protracted and intense. Yet, it seems evident that the wavering fortunes in that struggle have been a function not so much of the effectiveness of the regulations themselves, but rather of the broad national policies of the CoCom member countries in adhering to and enforcing both the spirit and the letter of the restrictions.

Revelations of Soviet Acquisitions Strategy

The full extent of USSR operations to acquire Western technology and militarily relevant technical information became public knowledge when an article appeared on April 2, 1985, in the Paris newspaper *Le Monde*, entitled "The KGB in France." The article was expanded by its author into a book during the following year.[5] The author reported on the work of an officer in Directorate "T" (technology) of the Soviet KGB. The latter provided a first-hand account of "front" companies that purchased high-tech equipment in France and shipped it to foreign countries, which then made deliveries to the Soviet Union.

Professor Philip Hanson of the University of Birmingham in the United Kingdom examined directly five of the documents referred to in the book and has analyzed them in some detail in a paper prepared for the Royal Institute of International Affairs.[6] The documents included: (1) a 128-page report on the use of *spetsinformatsiia* (special information) materials obtained clandestinely from the West during 1979, i.e., at the height of detente; (2) a subsequent 125-page report for 1980, that includes asessments by twelve Soviet "customer" ministries; (3) a 105-page document setting out tasks for collecting information on missile/space technology during the 1981–1985 plan period and providing a list of target companies, most of which are located in the United States; (4) a 90-page report from Directorate "T" of the KGB for the year 1980, suggesting that this unit also conducts technology acquisition through civilian intelligence operations; and (5) a single 27-page tabulation from two separate reports, showing the allocation of tasks among different Soviet agencies, as well as their budgets.[7]

France is not the only country where evidence of the Soviet technology-transfer apparatus has come to light. In early 1985, the Federal Republic of Germany's Ministry of Internal Affairs issued a communique which called attention to an acquisitions manual for Soviet intelligence officers, translating its title as "Coordinated Requirements for Technical Acquisition Tasks." Apparently, the USSR State Committee for Science and Technology supervises the preparation of this "Red Book," which contains as many as 27 chapters that in effect constitute Moscow's shopping list for technologies abroad.[8]

Finally, in September 1985, the U.S. Department of Defense, in coordination with the Central Intelligence Agency, released an unclassified White Paper. It states that "virtually every Soviet military research project — well over 4,000 each year in the late 1970s and over

5,000 annually in the early 1980s — benefits from [legally and illegally acquired Western] technical documents and hardware."[9] Department of Defense Directive 2040.2 mandated annual assessments of the effect Western technology transfers to the USSR and other Warsaw Pact countries have on the security of the United States. Only two of these assessments have been released, presumably in "sanitized" versions. Still, it is known that technological equipment and information collected by the Soviets from the West during the late 1970s through the mid-1980s has enabled the Soviet military-industrial complex to benefit in the following ways, ranked in order of priority:[10]

- To redirect USSR technical approaches in about 100 projects each year for weapons systems and key military equipment. . .
- To initiate several hundred new short- and long-term projects per annum in technical areas hitherto not considered.
- To raise the technical levels of several thousand developmental projects every year for military equipment, manufacturing and design procedures.
- To eliminate the need for or shorten more than 1,000 military research projects per annum, thereby reducing — up to three years — the lead-time required to produce more advanced weapons and equipment.

Soviet Acquisitions Programs

The U.S. Defense Department White Paper cited above identified two Soviet programs for covert and overt acquisitions. The first is directed by the Military Industrial Commission or VPK *(Voenno-promyshlennaia Kommissiia)* which is officially attached to the USSR Council of Ministers' presidium. It uses intelligence channels, among others, to obtain "one-of-a-kind military and dual-use hardware, blueprints, product samples and test equipment." American design concepts are adapted to improve the technical levels of Soviet defense production. VPK has been chaired since February 1988 by Igor S. Belousov, formerly head of the Shipbuilding Ministry,[11] which is one of the twelve customer agencies in Moscow for technology obtained from abroad (complete list of these ministries follows below).

A recent operation under this first program was aborted when U.S. Customs Service agents in Miami arrested four techno-smugglers from the Netherlands. They had attempted to divert into Bulgaria a $1.5 million VAX 8800 computer, which can be utilized for systems that operate ballistic missiles and radar installations. The computer had been shipped previously to a company in Boston and modified for 50-cycle electric current in the Soviet Bloc. One of the foursome, Eddy Gorandus Haak, boasted that he had already diverted to the East ten computers from the United States during the previous year.[12]

Among the most-wanted smugglers of arms and high technology, the following eight are in the latter category and appear on a list issued by the Customs Service of the U.S. Department of the Treasury:

- Richard Mueller and Volker Nast, both German nationals, are charged in several indictments for attempted diversion of sophisticated computer equipment to the USSR.
- Fred Schiavo and Dieter Enderlein, both Swiss, are suspected of conspiring to export $1 million worth of computers to the Soviet Union through Canada.
- Bryan Williamson, a British subject, is wanted for illegally exporting computers to Bulgaria through West Germany.
- Dietmar Ulrichshofer, an Austrian, is a fugitive from charges of illegally shipping $10 million worth of computers, electronic equipment and communications gear to the USSR.
- Laszlo Levente, a Hungarian-born German citizen, is wanted for illegally exporting computers to Hungary and other East Bloc countries.
- Richard K. Smyth, an American, is a fugitive in a case involving the illegal export of 800 krytrons, electronic microswitches used as triggers for both conventional and nuclear weapons.

The second major Soviet acquisitions program is under the Ministry of Foreign Economic Relations, which also utilizes intelligence services to obtain dual-use manufacturing and test devices that are installed on production lines. Microelectronics, computers, communications, machinery, robotics, diagnostic and other export-controlled equipment are sought for increasing the efficiency of Soviet weapons-producing industries.

Twelve key USSR ministries involved with defense manufacture provide the desiderata for

specific collection requirements. They are the following, with names of ministers in parentheses:[13]

- Aviation Industry (A.S. Systsov)
- Machine Building (B.M. Belousov)
- Defense Industry (P.V. Finogenov)
- General Machine Building (V.Kh. Doguzhiev)
- Communications Equipment Industry (E.K. Pervyshin)
- Radio Industry (V.A. Kurochkin)
- Medium Machine Building (a cover name for the nuclear weapons program currently headed by L.D. Riabov)
- Shipbuilding Industry (I.V. Koksanov)
- Electronics Industry (V.G. Kolesnikov)
- Chemical Industry (Iu.A. Bespalov)
- Electrical Equipment Industry (O.G. Anfimov)
- Petroleum Refining and Petrochemical Industry (N.V. Lemaev)

During the 10th Five-Year Plan (1976–1980), for example, more than 3,500 requirements from these twelve ministries could be met successfully. About half of the 30,000 pieces of hardware and one-fifth of the 400,000 documents collected throughout the world were used to improve Soviet military equipment and weapons systems. However, only one-third of all VPK requirements are fulfilled, completely or in part, each year, suggesting that Western efforts to prevent this legal and mostly illegal high-tech transfer do have some effect.

The "Collectors": KGB and GRU

The First Chief Directorate (foreign intelligence) of the KGB was headed for ten years by Colonel General Vladimir A. Kriuchkov[14] before he became Chairman of the Committee on State Security on October 1, 1988. That Directorate includes the specialized "T" (technology) Directorate, which is staffed with about 1,000 officers. All of them are scientific experts, and some 300 serve abroad at any given time. They use as cover the USSR embassies, trade missions, academic exchanges and assignments as "acceptance engineers" with companies that have Soviet contracts.

The GRU or Chief (military) Intelligence Administration for the General Staff of the Soviet Armed Forces commands some 1,500 officers on duty outside the USSR. All Soviet military attaches belong to the GRU. In addition to using covers similar to those adopted by the KGB, GRU officers are posted with the government airline, Aeroflot, and the merchant marine, Morflot. Perhaps due to sheer numbers, military intelligence reportedly meets more VPK requirements than its KGB competitors. One should mention also that some of these collection tasks are assigned as well to the "fraternal" intelligence services of the East European satellites.

Ministry of Foreign Economic Relations

Formerly called the Foreign Trade Ministry, the Ministry of Foreign Economic Relations has been headed since January 1988 by Konstantin F. Katushev. It administers the trade-diversion program. A recent example involved prominent Japanese and Norwegian firms. During 1983–1984, engineers from the Toshiba Machine Company made some six visits to the USSR shipyard at Leningrad, where they installed computer-controlled machinery to produce quietly revolving propeller blades for Soviet nuclear submarines. The Kongsberg Vaapenfabrik in Norway supplied the software. The latter's contract also included a five-year service agreement.[15]

Katushev's ministry operates literally hundreds of foreign trade companies worldwide. Apart from providing cover for intelligence officers, it is an independent collector as well. During the late 1970s and early 1980s, some 15 per cent of all VPK assignments and 9 per cent of the "most critical" ones were satisfied with the help of Foreign Economic Relations Ministry officials. They also collected almost one-third of all samples, as opposed to documents.[16]

Secretly subordinated to the Foreign Economic Relations Ministry, although claiming to be a public organization, is the USSR Chamber of Commerce and Industry. Lieutenant General Evgenii P. Pitrovanov (KGB), the former chairman, also sat on the governing board of the U.S.-Soviet Trade and Economic Council.[17] Among some 140 identified officials of the Chamber, about one-third are known or suspected intelligence officers. Many of them work as quality-control inspectors ("acceptance engineers") who check the specifications of products purchased by the Soviet Union from foreign countries.

KGB or GRU officers are assigned to these factories abroad for weeks or months, and may return to them several times. As quality-control inspectors, they also contact other firms and attempt to recruit Western engineers or scientists. These "acceptance engineers" prepare false documents regarding Soviet end-users, with about half of all legally imported equipment being shipped to the USSR military-industrial complex. This suggests that many imports not subject to Western export controls are of value to the Soviet defense establishment. The Chamber of Commerce and Industry holds about 200 exhibits each year in Moscow. If a Western firm is persuaded and actually does display its electronic, instrument-making, engineering or other sensitive equipment in the USSR, a Soviet official invariably will pressure the company to sell its samples rather than ship them home.[18]

The Chamber of Commerce and Industry has an automated storage and retrieval system which uses IBM 370/148 and Digital PDP 11/70 computers, legally purchased in 1978 from the United States. It thus can tap into Western on-line information services. The Chamber also administers *Soiuzpatent* (headed by KGB officer M.L. Gorodiiskii), which serves as the only "patent attorney" for foreigners who wish to patent inventions or trade-marks in the USSR. Finally, a pool of some 6,500 skilled translators annually produces about 180,000 pages in the Russian language from open-source material on Western state-of-the-art technology.[19]

"Academic" Collectors

The USSR Academy of Sciences (headed since 1986 by computer expert Gurii I. Marchuk) and the USSR State Committee for Science and Technology (under Boris L. Tolstykh since February 1987), although mainly occupied with overt collection for nondefense industries, are both tasked by VPK for military research projects. Their representatives attend scientific, academic and business conferences abroad. Several thousand Soviet and East European citizens come to the United States each year as nontourists. Between the late 1970s and early 1980s, the number of targeted American academic centers had increased threefold to sixty. Most of the information sought is in applied technology and engineering, rather than in basic research.[20]

According to the former U.S. Deputy Under Secretary of Defense for Trade Security Policy, Stephen Bryen, graduate students from the Soviet Union have tripled in number over the past year at American universities, not to mention about 1,500 short-term visitors annually from the USSR. An interagency committee, chaired by an official from the U.S. Department of State, decides whether to admit individual East European and Soviet scientists or engineers. It seems difficult to believe that only certified intelligence agents are refused a visa, notwithstanding that all such visitors "must be considered conduits of information to their intelligence services."[21]

Perhaps less surprising is the openness extended to these "visitors" on American college campuses. The University of California at Berkeley has a $7.5 million Cray X-MP/12 supercomputer, which was to be linked with 5,000 microcomputers around the campus during 1987. The University's Assistant Vice Chancellor for Information Systems, Raymond Neff, was quoted as saying that it would be "foolish" to prevent the handful of Soviet Bloc students from access to the supercomputer, explaining: "We invite these prestigious scholars [sic] to our university.... We would look almost infantile."[22]

Difficult Choices for the U.S.

Western intelligence communities have reported the consensual finding that, despite the detente rhetoric from Moscow, there has been no perceptible slow-down in Soviet military production or in the development of exotic weapons. The latter include: high explosives that approximate low-yield nuclear weapons in destructive capacity; precision-guided munitions with an almost zero circular-error-probable accuracy; hypervelocity impact weapons; and advanced propulsion technologies. This picture of unremitting Soviet military production and concentration of development efforts must be correlated with the documented fact that, since the accession to power by Gorbachev in March 1985, the United States has uncovered more efforts than ever before by Soviet Bloc agents to penetrate its defense activities.[23] The correlation yields a (literally) dark side of the "Gorbachev detente" — one that should give U.S. and Western policy-makers pause in assessing the meaning and

objectives of his *perestroika*, and its implications for Western security.

How can the United States cope with the problem? A U.S. Government source suggests that our basic objective should be twofold: (1) to maintain a technological lead over the USSR in vital design and manufacturing know-how; and (2) to strictly control key dual-use products, including computer-aided design and manufacturing systems, as well as automatic test and inspection equipment. The ultimate goal would be to deny the USSR "access to documents, hardware and technologies that would accelerate their military programs."[24]

Yet, can these objectives be carried out in the face of prevalent trends unleashed in the new detente climate? Peter Sharfman, an official in the Congressional Office of Technology Assessment, has suggested that change in U.S. export policy seems destined to follow in the wake of new interpretations of three concepts: (1) definition of critical technologies, (2) availability of the technology in other countries, and (3) Presidential authority to apply (or relax) controls because of foreign policy considerations. The U.S. list of critical technologies includes thousands of items.[25] Sharfman predicts that U.S. trade restrictions against the USSR will be loosened because the CoCom list of restricted items is much shorter than the U.S. list, and the United States has very little to offer in the way of technology that cannot be obtained elsewhere. Hence, he projects that unilateral American export controls will generally be abandoned, and "the U.S. will seek greater reciprocity in international trade."[26]

The idea of controls on dual-use technology also raises problems. For example, a recent study, prepared at the request of the U.S. Department of State under the auspices of the National Academy of Sciences and concentrating on computer technology, reports the finding that widely available 32-bit microprocessors can be linked in parallel for more computing power and speed. The report recommends total export controls on (1) supercomputers and sophisticated semiconductor manufacturing systems, (2) military-related software, and (3) programs used to design military software. It also calls for tighter controls on international computer networks. Yet, it proposes that other software, currently restricted but accessible in countries that are not members of CoCom, should be exported freely by the United States and its allies.[27]

It is unnecessary to point out the inherent contradictions inherent in this report. Perhaps the worst possible answer to the problem of technology transfer are regulations that nominally restrict access by the Soviet Bloc to militarily useful technology, while at the same time the key elements for such technology are freely made available.

In the final analysis, the options for the United States in the realm of technology transfer relate not to technical criteria, but to fundamental policy. Even a cursory study of the past seventy years establishes that Soviet leaders have sought a relaxation of tensions with the West only when their domestic problems could not be solved without foreign assistance. Beginning with Lenin and his New Economic Policy, through Stalin and almost $12 billion in U.S. lend-lease during World War II, the successive "thaw" and "relaxation of tensions" under Khrushchev and Brezhnev,[28] several generations of American businessmen seemingly have not learned the lesson that there are no counterparts in the Soviet Union. Even more difficult to comprehend are the reactions of Western statesmen who have ignored the amply documented fact that detente has always coincided with surges in Soviet covert activities directed against NATO's military-industrial strength. Furthermore, the choice Western high-tech equipment that is being garnered today "by hook or by crook" continues to be funneled on a priority scale to the Soviet Armed Forces, which have been in the midst of their own "revolution in military affairs."

The USSR wants direct transfusions on a massive scale of Western high technology. Leaders of Western governments seem willing, in some cases even enthusiastic, to accommodate the Soviet quest. During the last three months of 1988, high-ranking officials from the United Kingdom, France, the Federal Republic of Germany, Italy, Japan and other countries traveled to Moscow bearing offers that probably totaled some $12 billion, much of it in untied credits which can be used without restrictions. At the same time, the Soviet hard-currency debt to the West had reached by mid-February 1989 about $41 billion.[29]

Credits from the West will only make it easier for the USSR to purchase that which

cannot be stolen. And if the hope of long-range, benevolent reform in the Soviet Union is allowed to overshadow the clear and immediate dangers inherent in the technology transfers, an old Russian proverb should give us pause: *nadezhda mat' durakov* (hope is the mother of fools).

NOTES

1. Curtis Cate, ed., *Afghanistan: The Terrible Decade, 1978-1988* (New York: American Foundation for Resistance International, 1988), pp. 48–49 and 81–82; David Isby, "New Non-Contact Mines from Afghanistan," *Jane's Soviet Intelligence Review*, September 1988, pp. 21–22.

2. "Vystuplenie M.S. Gorbachevn v Organizatsii Ob'edinennykh Natsii," *Pravda*, December 8, 1988, pp. 1–2.

3. Ambassador Allan Wendt, "U.S. Export Control Policy: Its Present and Future Course," *Current Policy* (Washington, DC: U.S. Department of State, June 14, 1988), No. 1094, p. 1.

4. *The Economist*, October 19, 1985, p. 49, on STEM; *Business America*, January 18, 1988, p. 7, on export control history.

5. Thierry Wolton, *Le KGB en France* (Paris: Grasset, 1986), 312 pages. An article by Henri Regnard, "L'URSS et l'information scientifique, technologique et technique," *Defense Nationale*, December 1983, pp. 107–121, had appeared earlier in a professional journal and, thus, became available only to a limited, specialized readership.

6. Philip Hanson, "Soviet Industrial Espionage: Some New Information," *RIIA Discussion Papers* (London: Royal Institute of International Affairs, 1987), 39 pages.

7. Ibid., pp. 3–5.

8. Bundesministerium des Innern, *Das "Rote Buch" oder wie die UdSSR westliche Technologien beschafft* (Bonn: January 1985). See also *Insight*, January 9, 1989, p. 38, which cites the former head of West Germany's Federal Intelligence Service, Herbert Hellenbroich, on the same subject.

9. [U.S. Department of Defense], *Soviet Acquisition of Militarily Significant Western Technology: An Update* (Washington, DC: September 1985), 34 pages [hereafter cited as *Soviet Acquisition*]. Although the report did not indicate that it was published by DoD, it's source is identified by Roger W. Robinson, Jr., "East-West Trade and National Security," *The Heritage Lectures*, February 11, 1986, No. 50, pp. 3–4. Dr. Robinson served as a senior director on the NSC staff from 1982 to 1985.

10. *Soviet Acquisition*, op. cit., p. 8.

11. Herwig Kraus and Alexander Rahr, comps., *The Composition of the Soviet Government* (Munich: Radio Liberty, November 2, 1988), RL Supplement 5/88, p. 2.

12. George Volsky, "Computer Suspect Called Part of Ring," *New York Times*, December 24, 1988.

13. *Soviet Acquisition*, op. cit., Figure 1, p. 3. The identifications of incumbent Ministers are from Kraus and Rahr, op. cit., pp. 4–9.

14. Amy Knight, "The KGB and Soviet Reform," *Problems of Communism*, September-October 1988, pp. 62–63. Kriuchkov also had served as KGB station chief in the United States.

15. *Wall Street Journal*, April 25, 1988.

16. *Soviet Acquisition*, op. cit., pp. 20–21. The source does not indicate the basis for these estimates. They were probably derived from the documents examined by Prof. Hanson, op. cit.

17. U.S. Department of State, *Intelligence Collection in the USSR Chamber of Commerce and Industry* (Washington, DC: January 1987), p. 2, gives a biographic sketch of Fitrovanov.

18. Ibid., pp. 4–5.

19. Ibid., pp. 9, 11.

20. *Soviet Acquisition*, op. cit., p. 21.

21. Stephen Bryen, "The Dangers of 'Scientific Exchanges'," *National Security Record*, November 1988, p. 3; and "Don't Sell High Tech to Moscow," *New York Times*, March 3, 1989. Dr. Bryen also served as Director of the Defense Technology Security Administration, 1981–1988.

22. Kenneth Weiss, "UC-Berkeley supercomputer stirs fear KGB may gain access," *San Francisco Examiner*, July 20, 1986.

23. Robert M. Gates, Deputy Director of Central Intelligence, "Future Challenges to U.S. Intelligence," *National Security Record*, November 1988, p. 5. Dr. Gates, a career CIA officer, has been appointed Deputy National Security Adviser to President Bush.

24. *Soviet Acquisition*, op. cit., p. 23. The same recommendations were made two years later by a panel of experts and published as *Balancing the National Interest: U.S. National Security Export Controls and Global Economic Competition* [Lew Allen, Jr., Chairman] (Washington, DC: National Academy of Sciences, 1987, p. 29.

25. Department of Defense, *The Militarily Critical Technologies List* (Washington, DC; Office of the Under Secretary for Research and Engineering, October 1984), in four parts. This represents an unclassified version of a presumably longer list.

26. Peter Sharfman, "U.S. Export Policy in Transition," a paper delivered at a Stanford University symposium, December 3, 1988, p. 11. See also James M. Markham, "Soviet Sanctions May Be Over Now," *New York Times*, February 4, 1989.

27. John Markoff, "U.S. Shift Urged on Export Rules for Technology," *New York Times*, December 30, 1988. The full report by the National Research Council is entitled *Global Trends in Computer Technology and Their Impact on Export Control* (Washington, DC: National Academy Press, 1988), 288 pages.

28. Seymour Weiss, "U.S.-Soviet Detente: The Collision of Hope and Experience," *Strategic Review*, Winter 1989, esp. pp. 18–20.

29. A. M. Rosenthal, "The Tantalizing Question," *New York Times*, February 17, 1989. See also Thierry Pecles, "Le Financement par l'Occident de L'Economie Sovietique," *Est & Ouest* (Paris), January 1989, pp. 3–6.

☆ ☆ ☆ ☆

Replies to Written Questions,
following testimony on April 19, 1989,
before the U.S. Senate Foreign Relations Committee

by Richard F. Staar

Senator Pressler to Ambassador Staar:

1. Senator **PRESSLER** (Africa): "In your view, what was the objective of Soviet participation in the recently concluded Angola/Namibia peace accord? How do you view long-rang Soviet strategy with respect to southern Africa?"

STAAR: The USSR had been excluded from earlier talks on Namibia. By being accepted as one of the two major participants, it established another precedent in support of the claim that nothing of significance can be accomplished world-wide without the Soviet Union. The SWAPO charter is based on CPSU rules of organization (Iu. I. Gorbunov and A. V. Pritvorov, Namibia, Moscow: Nauka, 1983, pp. 110-118), and it would appear that the next government in Namibia will be a Marxist-Leninist one. The Republic of South Africa (RSA) will no longer have a buffer to the north-east, with yet another front-line state on its borders. The long-range Soviet strategy is directed at subverting the RSA and ultimately replacing its regime with one that has adopted a "revolutionary-democratic" policy under the African National Council. (See Keith Campbell, ANC: A Soviet Task Force?, London: Institute for the Study of Terrorism, 1989). This would provide the USSR with naval bases and access to strategic raw materials in the future.

2. Senator **PRESSLER** (Africa): "How do you view the nature of the Soviet commitment to the Luanda regime? Do you believe the Soviets will continue political and military support for the MPLA party?"

STAAR: Based on visits in both directions between Moscow and Luanda, as well as the investment over the years of almost one billion dollars in economic (CIA, Handbook of Economic Statistics 1988, Table 154, p. 178) and more than three billion during 1982-1986 in military

assistance (ACDA, World Military Expenditures and Arms Transfers, March 1988, Table III, p. 127), it would appear that the USSR will continue to support the MPLA-PT regime in Angola. After departure of the Cubans, the Soviet burden will ease and some of the foreign exchange from The Cabinda Gulf Oil Company, a subsidiary of Chevron (490,000 barrels a day at the end of 1988), may end up in Moscow. A twenty-year treaty of friendship was signed in 1976, and the USSR has designated MPLA-PT a "vanguard party," i.e., one step below that of a ruling communist party. Hence, the Soviet commitment is also based on ideology.

3. Senator **PRESSLER** (Middle East): "Could you give us your analysis of the recent decision by Gorbachev to provide Libya with long-range SU 24 aircraft, capable of carrying chemical or other weapons to Israel and indeed to NATO Europe?"

STAAR: Even though Soviet spokesmen claim that the recent delivery of these aircraft to Libya only implements an earlier agreement, the SU-24 "Fencer" is qualitatively superior to the fifty Sukhoi-20/22 "Fitters" which Khadafi already had (International Institute for Strategic Studies, The Military Balance 1988-1989, London: September 1988). It would seem that, by selling for cash first-line planes to the Libyans, the USSR showed its solidarity with a regime that has been identified by the U.S. government as supporting international terrorism. The reverse suggests disregard for the United States as well as for Israel and the West European members of NATO. The Soviet deliveries should result in a positive reaction from certain Arab countries, however.

Senator Pressler to all panelists:

1. Senator **PRESSLER** (to all panelists): "With the dawning of the era of Glasnost and Perestroika, a lot of cautious optimism is being expressed that the Cold War is over, that the Soviet Union will

refrain from exporting revolution, and that the Iron Curtain will come tumbling down—never to be resurrected. I've heard many learned scholars say that, now the Soviets have come this far, there can be no turning back, even if Gorbachev is replaced by another leader. IS THIS A REALISTIC ASSUMPTION? ON WHAT FACTUAL BASIS DOES THIS ASSUMPTION REST? DOES THIS ASSUMPTION ARISE MORE FROM SOME SUBJECTIVE, INTUITIVE BASIS THAN FROM OBJECTIVELY MEASURABLE FACTUAL CONDITIONS?

STAAR: The optimism and even euphoria concerning a "new era" seems to be based more on wishful thinking than on any serious analysis of the facts. The pronouncements made by Gorbachev certainly sound good. However when one examines them carefully, there are many contradictions. For example, despite the INF treaty of December 1987 and promises that the military budget would be reduced, the Joint Economic Committee of the U.S. Congress reported (CIA and DIA, The Soviet Economy in 1988, released 22 April 1989) that USSR defense spending increased by 3 percent during 1988. The Berlin Wall has not come down, and the support of Marxist-Leninist regimes continues throughout the Third World. Even were Gorbachev to be replaced, those aspects of Soviet foreign policy probably will not change. (See J. R. Azrael, The KGB in Kremlin Politics, Santa Monica, CA.: Rand Corporation, 1989, for the possibility that former KGB chairman N. M. Chebrikov is positioning himself to become the next CPSU general secretary). It is understandable why ideological beliefs have been played down for reasons of public relations. The USSR needs food, high tech, and, above all, hard currency from the West.

2. Senator **PRESSLER** (to all panelists): "Disregarding the commands and predictions of Lenin on the subject of world revolution, would it not be in the national interest of the Soviet Union to continue trying to destabilize certain countries or regions of the

world; that is, continue using covert subversive tactics to ensure that these countries have leaders friendly to the Soviet Union?"

STAAR: Destabilization and subversion continue as instruments of Soviet foreign policy. The difference today is that proxies are used to achieve the same purpose. Assassination of Pope John Paul II, because of his influence on the Solidarity movement in his native Poland, was attempted by a Turk who admitted to have been KGB-trained in Syria and Bulgaria (see Antonio Alfano, Report of State Prosecutor's Office, Rome: 28 March 1984). A more recent case involved President Zia ul-Haq, who was killed with 30 others when their C-130B aircraft crashed on 17 August 1988. The Pakistani board of inquiry found evidence of sabotage. The evidence strongly suggests that the operation followed a KGB-style, with low-key but decisive action and a fall-back plan if the primary one had failed. Cui bono? The Soviet Union had rid itself of a staunch American ally and hoped that his successor might refuse to play the role of conduit for U.S. military assistance to the Mujahedeen in Afghanistan. (For details on the board of inquiry report, see Yossef Bodansky, "Who Killed President Zia--and How?", Freedom at Issue, March/April 1989, pp. 22-27.)

3. Senator **PRESSLER** (to all panelists): "What might explain the Soviet Union's apparent willingness to allow its former puppet client states in Eastern Europe to go their own way? Is this basically an economic decision on the part of Moscow--a recognition that it no longer can afford the economic costs of imposing its authority on these countries--or is it more of a political calculation that the good will created by freeing these nations from Soviet domination will win Moscow more friends and influence, both in Eastern Europe and elsewhere?"

STAAR: Of the six Soviet client-states in Eastern Europe (Albania and Yugoslavia are excluded for obvious reasons), only two

have moved toward liberalization: Hungary and Poland. The remaining four regimes have refused to embark on meaningful reforms. Hungary obviously is not as important to the USSR as is Poland. The Kremlin probably welcomes the efforts by General Wojciech Jaruzelski and Mr. Lech Walesa to obtain financial assistance from the West. Yet the Budapest and Warsaw communist regimes are cognizant of the facts of life: the Soviets will use their armed forces to invade, if the basic parameters of WTO membership and continuing rule by the indigenous communist party are breached. Kremlin motivation, thus, is both economic and political. By projecting the image of a benevolent master, imbued with "new thinking," Western Europe and other members of NATO may convince themselves that the USSR is becoming a more civilized member of the world community.

4. Senator **PRESSLER** (to all panelists): "Isn't the real objective of Soviet foreign policy for the time being to loosen up the purse strings of Western capitalists for investment in Communist economies and to create an image of civility that will bring membership in international lending and trade organizations? If that is their objective, wouldn't it be wise to be cautious in responding tit-for-tat to each new Soviet policy pronouncement? I guess I'm somewhat troubled by recent criticisms that our Administration has no policy or policies in response to Soviet initiatives. A policy of deliberate caution and forebearance, it seems to me, is indeed the appropriate policy or strategy for the time being. As I indicated to Secretary Baker yesterday, I think it would be wrong to raise expectations that the U.S. will respond to the Soviets by throwing open the doors to massive lending and aid. WOULD ANY OF YOU CARE TO COMMENT ON THESE THOUGHTS?"

STAAR: I would agree with these thoughts and only emphasize that Soviet pronouncements are not necessarily implemented. The USSR has launched a high-powered offensive to establish joint ventures with

the West and Japan (note the general agreement on 25 joint ventures with a U.S. private trade consortium, announced by Moscow radio on 30 March 1989). The problem revolves around how to overcome the lack of hard currency in the Soviet Union. Fortunately, the United States can not afford a "Marshal Plan" nor should we attempt to organize one with our allies. The basic question that might face us otherwise is how the USSR would behave, if it were to emerge as an economic superpower in the 21st century. No sensible betting person would risk any money on such a wager regarding the consequences of such a development.

5. Senator **PRESSLER** (to all panelists): "What evidence do we have, if any, that the Soviet Union is involved in international narcotics trafficking--either as a tool for destabilizing other countries or a hard currency generator?"

STAAR: According to Dr. Rachel Ehrenfeld (see her article on narco-terrorism in Strategic Review, summer 1988), with whom I spoke on 27 April 1989, drugs are being transported in sealed trucks from the "golden triangle" across the USSR to ports for transshipment abroad. There have been reports of heavy involvement also by Bulgaria which could not be happening without Soviet knowledge. Congressional hearings in Miami, as far back as 1983, developed evidence of direct involvement in drug smuggling by the Cuban regime. One of Castro's admirals, Aldo Santamaria Cuadrando, is reported to have stated the following: "We are going to fill Miami completely with drugs...so that more young Americans will die." (Wall Street Journal, 10 February 1986.) Although hard currency is obviously important to the USSR and other communist regimes, I believe that the Cuban naval officer revealed the true reason behind their trafficking in narcotics.

Additional questions from Senator Pressler for Ambassador Staar:

1. Senator **PRESSLER:** "What can we expect from a policy that both concentrates on the United States and on the Soviet borderlands?"

STAAR: These two policies are being pursued simultaneously, with the USSR objective of becoming recognized as a superpower. The Soviets indirectly suggested that they might concentrate on the borderlands and deemphasize the U.S. (as indeed A. N. Iakovlev had recommended). This may have been a trial baloon to see whether we would react and perhaps offer concessions to Moscow. Having the world as a stage certainly offers an almost infinite variety of opportunities to be exploited by USSR propaganda against the United States. Five major disinformation campaigns currently (1989) under way from the Soviet Union against the U.S. are listed in my prepared remarks. The policy is truly global which makes it more dangerous for us.

2. Senator **PRESSLER** (to all panalists): "How do the Soviets react when confronted by U.S. representatives with examples of disinformation?

STAAR: American government officials have periodic meetings with their counterparts, alternating between Washington and Moscow. Twelve books were published in the USSR during 1988 which included the propaganda themes, listed in my executive summary. At a recent meeting, USSR officials promised to discontinue publishing such vicious lies. However, the Soviet foreign ministry spokesman Gennadii Gerasimov (Sovetskaia kultura, 25 October 1988) had denied that any of the above allegations comprise disinformation. Even Gorbachev's promise to Mr. Charles Z. Wick, USIA director, in December 1987 that there would be "no more lies" obviously has been broken. This is a prime example of deception (maskirovka) at the very top. Since we apply no sanctions, the Soviets probably will continue these outrageous activities.

3. Senator **PRESSLER** (to all panelists): "Does Mr. Gorbachev face a potential challenge from his armed forces?"

STAAR: If he does face such a challenge from the military, this would come only after substantial cut backs in numbers. The 10 percent reduction over the next two years, announced in December 1988 at the U.N., is really not significant. Were Gorbachev to cut military personnel by 37%, which Khrushchev did between 1955 and 1958 (SShA: Ekonomika, politika, ideologiia, no. 12, 1987, pp. 18-19), that might move the High Command to support a future conspiracy against him. It is difficult for the military alone to organize a plot because of the tri-partite control system: the CPSU, the zampolit system, and the KGB osobyi otdel, in the armed forces. The most recent Central Committee plenum on 25 April 1989 resulted in the ouster of nine marshals and generals from that body, bringing the military representation down to 15 out of 251 current voting members. That alone suggests much less influence for the armed forces.

4. Senator **PRESSLER** (to all panelists): "Do you have any recommendations on how to protect U.S. high technology?"

STAAR: Other than reducing the number of Soviet diplomats, exchange students in certain departments (e.g., high energy physics) at American universities, and USSR foreign trade representatives, we should attempt to convince our allies to abide by the CoCom embargo list. Unfortunately, it seems that we are not following through on reciprocity in numbers at our respective embassies and consulates. A recent decision seems to have stopped or even reversed the executive order to achieve equal levels. More FBI and U.S. Customs' agents might help to block Soviet theft and trade diversion on a mass scale (see attached article on "The High-Tech Transfer Offensive of the Soviet Union," Strategic Review, spring 1989).

5. Senator **PRESSLER** (to all panelists): "How can Mr. Gorbachev reconcile Maxist-Leninist ideology of the class struggle with his theory of global interdependence?"

STAAR: Obviously, there is no way to square the circle by pretending that the class struggle and global interdependence do not contradict each other. Gorbachev gives the impression that the latter is merely a convenient methodology for structuring international affairs, within which to pursue "peaceful coexistence" for the time being. Lenin, of course, did the same thing and called it a peredyshka (respite) which his successor Stalin ended abruptly in 1929 with forced collectivization and industrialization. However, class struggle has not been given up as long as communists remain communists. Iakovlev, the closest advisor to the CPSU general secretary, gave an interview which was published in the United States only last fall. He stated the following: "We still believe in the socialist principle of a centrally planned economy" and "We say that capitalism is a dying society, but in its agony it is developing" (Center for the Study of Democratic Institutions, Los Angeles, CA., New Perspectives Quarterly, vol. 5, no. 3, fall 1988, pp. 32 and 33). It is noteworthy that a 432 page dictionary, entitled The Contemporary Ideological Struggle [Sovremennaia ideologicheskaia borba], Moscow: Politizdat, 1988) appeared late last year, with a first printing of 100,000 copies.

6. Senator **PRESSLER** (to all panelists): "What are some examples of legal high-tech deliveries to the USSR which were diverted to military use, despite promises to the contrary?"

STAAR: A high-ranking American diplomat, in a speech last year, gave the following illustrations:

> The Kama River truck plant received $1.5 billion in U.S. and other Western technology. The vehicles produced by the plant were used in the invasion of Afghanistan; others continue to support Soviet troops facing NATO in Central Europe.

American precision-grinding machines, sold to the USSR in the 1970s, produce small ball bearings which have been integral to development of the massive force of Soviet [mirved] missiles that threatens the United States today.

Two large floating docks, sold by the United States to the USSR for ostensibly civilian use, were diverted for repair of Soviet naval vessels [at Cam Ranh Bay].

(Source: Ambassador Allan Wendt, "US Export Control Policy: Its Present and Future Course," Current Policy, Washington, DC: U.S. Department of State, June 14, 1988, no. 1094, p. 1).

The CHAIRMAN. Thank you very much, indeed, Dr. Staar.

Senator HELMS. Mr. Chairman, thank you very much. I think the chairman will agree that seldom do we have four more distinguished witnesses than these four. Each of you is eloquent and I appreciate your coming and I am glad, Mr. Chairman, that you arranged to move up this hearing slightly to accommodate one or more of them. It caused a little problem for me because I have not yet mastered the art of being two places at one time. I had two committee meetings at the same time, Mr. Ambassador.

Let me just say that the subject before us today, Soviet foreign policy, is tremendously important, awesomely important, and I think, as some of the witnesses have said, we must be realistic about Soviet foreign policy, and the instances that you have given, Dr. Staar, already of the disinformation distributed by the Soviets is just almost unbelievable. Of course, you and I knew that, but it is a deep, dark secret to the American people. The American media do not carry that. They tell what a nice guy Mr. Gorbachev is, and that sort of thing. But they do not tell what is going on in the background.

But I feel that we cannot allow ourselves to be deluded by the so-called peace offensive, or by inferior scholarship, or by disinformation in the media, at home and abroad. It is the particular responsibility of this committee, the Foreign Relations Committee of the Senate, to be vigilant with respect to the formulation and conduct of this Nation's foreign policy, and to be vigilant in guarding against the intrigues of those whose foreign policy is hostile to the interests of this country and to the American people.

So, in my view, the classic objectives of current Soviet global policy have always been the following: One, the strategic encirclement of Western Europe and the dismemberment of the NATO alliance; two, the strategic encirclement of the Arabian peninsula; three, the strategic encirclement of southern Africa; four, the strategic encirclement of China pending a rapprochement between Moscow and Peking; five, the strategic isolation of the Western Hemisphere and the dismemberment of the Rio Treaty; and six, the strategic encirclement of the United States.

I know a lot of people will scoff at that. We have got to pause long enough to look at the facts and look beneath the veneer and look behind the smile and see what we really are confronting. Now, I have seen no evidence that these objectives have changed on the part of the Soviet Union, nor should we harbor any illusions about Soviet and German policy in Europe.

It seems clear that the Soviets would like for the West to pick up the tab for the Soviet empire in East Europe, but that they aim to keep the Communist system firmly in their control. At the same time, in East Europe, under Communist control, results in low-scale wages for workers, whom certain German financial and industrial circles seek to exploit. This German eastern policy has a long history with roots going back to the 19th century.

So, I am particularly pleased to have heard the comments, and I find myself hoping that the comments already made today will be given wider circulation than normally would be the case, and I am going to try to give some circulation to them. Thank you, Mr. Chairman.

[The prepared statement of Senator Helms follows:]

PREPARED STATEMENT OF SENATOR HELMS

Mr. Chairman, the subject before us today—Soviet foreign policy—is an important one. We must be realistic about Soviet foreign policy. We cannot allow ourselves to be deluded by Soviet peace offensives, by inferior scholarship, or by disinformation in the media. It is the particular responsibility of this committee to be vigilant with respect to the formulation and conduct of our Nation's foreign policy and to be vigilant in guarding against the intrigues of those whose foreign policy is hostile to our interests.

In my view, the classic objectives of current Soviet global policy have always been the following:

One, the strategic encirclement of Western Europe and the dismemberment of the NATO Alliance.

Two, the strategic encirclement of the Arabian Peninsula.

Three, the strategic encirclement of southern Africa.

Four, the strategic encirclement of China pending a rapprochement between Moscow and Beijing

Five, the strategic isolation of the Western Hemisphere and the dismemberment of the Rio Treaty.

Six, the strategic encirclement of the United States. Despite changes in rhetoric, I have seen no evidence that their objectives have changed.

We should not harbor any illusions about Soviet and German policy in East Europe. It seems clear that the Soviets would like the West to pick up the tab for the Soviet empire in East Europe but that they aim to keep the Communist system firmly in their control. At the same time, an East Europe under Communist control results in low wage scales for workers whom certain German financial and industrial circles seek to exploit. This German Eastern policy has a long history with roots in the 19th century.

I look forward to hearing the comments of our witnesses today and feel certain that we can benefit from the experience of our distinguished witnesses. We are glad to have all of you, but I especially am pleased to welcome back Ambassador Staar and Ambassador Jordan both of whom faced the Soviet challenge directly during their diplomatic service in Europe and in Latin America, and who have appeared before this committee previously.

Senator BIDEN. Thank you. The chairman had to go to the White House. They keep asking him down to the White House. Why don't they ask you down?

Senator HELMS. Well, they did, but I would rather be here. I have been to the White House.

Senator MOYNIHAN. Well, gentlemen, this continues a, to us, rewarding and stimulating set of propositions. I think it is fair that we have not heard such matters discussed, such possibilities raised in 40 years. And it was with that in mind that the chairman and Senator Helms decided to have these hearings.

And we began, as Senator Pell remarked, with the extraordinary performance of Ambassador Kennan. He said basically what I think most of you have said, we keep returning to is the ideological question.

When Mr. Gorbachev went to the U.N. on December 7 last, he said, "We are, of course, far from claiming to be in the possession of ultimate truth." "Well," you say, "Good God, man, that is exactly what you have claimed for 70 years." It is a claim which asserted itself and was shared by billions of people in the world. The elites of the 20th century were deeply committed to that proposition, and it threatened to take the century by storm. And it seems to have collapsed. Or has it?

We see, for example, the problems with the ethnic questions, as a Washington Post editorial this morning said, and the problem with ethnic questions is that they are not supposed to exist anymore. I mean, the Leninist writings on this would have it almost necessary to the validity of the ideology to say that 70 years after a Soviet regime comes to power, there will be no more Georgians and Azerbaijanis and such like that. There will be a Soviet man who emerges.

What we wonder is, what do you think they now think about what they thought. If they no longer think what they once did, then something surely profound has happened. And the question is, then, what do they think?

And I will say one more thing. We keep hearing that ideology has been dead in the Soviet Union for a long time, but I do not know that and you know a great deal more than I do. So, Professor Horelick, just to follow the line of our testimony, what do you think they think about what they thought?

Mr. HORELICK. I think that is a cardinal question. I have a view on it. It is obviously not susceptible to verifiable proof since it is a highly subjective, highly subjective matter. I believe, particularly with respect to foreign policy, but now increasingly with respect to domestic policy as well, that the precepts of Marxism-Leninism as handed down from the Stalin period have carried less and less operative weight in the Soviet Union. But they continue to play a very important symbolic and disciplining role.

One reason why I am inclined to take quite seriously the ideological revisionism that is taken place now is that it is not cost-free from the resume's perspective. It costs the leadership of the Soviet Union, which continues to assert its right to rule in terms of the ruling role of the Communist Party; it costs them something to tear down the mythology that the party has built around its claim to be keeper of the flame.

Soviet Communist power has rested, really, on two pillars: repression and mythology. With the end of the terror after Stalin's death, the role of mythology came to play a more important role in disciplining and keeping the system together. Gorbachev and his entourage are running serious risks of social indiscipline, of delegi-

timizing the role of the party in the Soviet Union, by now beginning to tear down the mythology that these Marxist-Leninist precepts lent to his rule before. This is an additional reason why I am inclined to take quite seriously the deideologization of both Soviet domestic and Soviet foreign policy.

Senator MOYNIHAN. Which has a positive aspect and a destabilizing one. It can stabilize some sets of relations and destabilizes——

Mr. HORELICK. That's right, including Eastern Europe.

Ambassador JORDAN. I suspect there is a number of different ways that they are thinking about what they thought before. I suspect, on the one hand, you have those who are quite concerned, and these are the people that we identify as quite hostile to Gorbachev, that are quite concerned that he may be doing things that they do not consider to be desirable. So there are probably some whose views have not changed substantially at all.

I suspect there are others whose views may have changed substantially; those are at least the sorts of people that the benign interpretation that I talked to you about before are citing. I think that is the most remarkable possible change because, if that group is not part of a deception, as some of the pessimists say they may be, but if that is a genuine interpretation, then we do have the growth in the Soviet Union of some people who do believe in a constitutionalist, democratic regime, who are aspiring to hold the executive accountable to an electoral, an elected semiparliament of some sort. Now, if that is true, that is enormous change.

Senator MOYNIHAN. I am prepared to believe an awful lot. I have lived with an awful lot of Soviet duplicity and been fooled by my share of it. But the idea that someone would write articles about the legal theory of the state by I. Kant as a form of disinformation——

Ambassador JORDAN. It is extraordinary, but it is an extraordinary development that there would be, because, as you know, that links to the theory of perpetual peace that Kant wrote about which was fundamentally linked to the theories of what would be a stable, international order. And what is remarkable in that, that is the discussion, I know you were familiar with Karl Friedrich, that was in his internal peace, and is part of a—the implications, of course, are that that would be a major change and we would indeed have the structural basis to the change of the Soviet Union.

But I suspect that there is a third perspective in this, and which is why I lean to being prudential in this whole process, and that is that there is certainly a substantial number of top leaders, and you look a little bit at what is the weight of these people, who are quite discouraged with the performance of the Soviet economy, quite aware that there are things that have not gone right but are not prepared to go as far as some of this other literature indicates.

Now, in that context, what I was talking about in part is the need for the United States to be cautious so that, in fact, if such changes are in fact occurring, we do not do things that will facilitate those who will ultimately undermine a fundamental perestroika, which would have, in fact, extraordinary implications for the world.

Senator MOYNIHAN. Dr. Mandelbaum, how would you respond?

Dr. MANDELBAUM. Senator, I would respond to your comments with three comments of my own. The erosion of ideology has been going on for some time, but under Gorbachev it has become an avalanche. It is true that Marxism-Leninism has been moribund for decades but now they have conducted a funeral. And that has real political consequences, as Dr. Horelick pointed out.

Senator MOYNIHAN. It commences to be disproved, which is a different thing from being ignored.

Dr. MANDELBAUM. Yes. Second, what do they now believe about what they did believe? Well, here, I am indulging in psychological speculation based on my conversations with members of the intelligentsia who are associated with Gorbachev, admittedly a small sample, but I think that these people are, in an odd way and quite unexpectedly in such a brutal and cynical system, naive idealists. They believe——

Senator MOYNIHAN. Would Senator Pressler mind if I let Dr. Mandelbaum finish?

Senator PRESSLER. Go right ahead.

Dr. MANDELBAUM. I think they believe that there is such a thing as socialism, that the ideals of the revolution were correct, that, somehow, the party has gone astray but if they right themselves they can build something that all the world will admire. I think there is no evidence that that is so, but if they did not believe that, they could not really go on.

Third, what is left if ideology is dead? Well, there is the self-interest of those who benefit from the system. That self-interest is powerful and there are many who do benefit. Second, there is, as you noted, the need for some basis for holding together the Russian Empire, because, without Marxism-Leninism, there is no reason for Georgians to be governed from Moscow. And third, there is the need for some justification for party rule even in Russia. If Marxism-Leninism is completely hollow, then there is no reason for Mr. Gorbachev to be sitting where he is because one day in May of 1985, eight old men chose him. I think that must worry him.

Senator MOYNIHAN. Thank you very much. Dr. Staar, we will get back to you.

Dr. STAAR. Thank you, Senator Moynihan. I would disagree with Dr. Mandelbaum. I do not believe that ideology is dead. As a matter of fact, we know—these are facts, not speculations—we know that before he assumed the leadership of the Communist Party of the Soviet Union, Mr. Gorbachev himself was in charge of ideology. His deputy, until recently, Ligachev, was identified as being in charge of ideology.

On September 30 of last year, a reorganization of the central party apparatus under the Central Committee of the party took place, as a result of which six commissions were established. One of these six is ideology. It is under a full member of the Politburo, a secretary of the Central Committee whose name is Medvedev. Subsequent to that, an article appeared in Pravda by a man named Kapto, who is head of the ideological department under this commission, he describes that department as having six subdivisions. Now, one of these subdivisions is responsible for, and I quote him, "ideological activity in the international arena."

So, if ideology is dead, why do you appoint a full member of the politburo, a secretary of the Central Committee, in charge of a commission on ideology, which is very elaborate and which obviously functions? I think I gave some examples of that, the disinformation campaign, which is based on Soviet sources.

Senator MOYNIHAN. Dr. Staar, you must be careful when you pose such a rhetorical question to a New York county Democrat. Why you do it is called "Jobs for the boys." [Laughter.]

Dr. STAAR. I defer to the Senator's experience.

Senator MOYNIHAN. Senator Pressler, you are very courteous. Oh, I am sorry, Senator Helms has not finished his questions. Then he is going to the White House after all.

Senator HELMS. He is trying to get rid of me. Mr. Chairman, I see some very fine young people out in the audience. I am pleased that just about every meeting of this committee, we are visited by Close-Up and Presidential Classroom young people. And I wonder, however, on what do they predicate their judgments about what is going on in the world? If we have Senators who do not know it, and many do not, then how can we expect the people out in the country to know?

Dr. Staar, for example, you might include in your very fine list of the deceptions and falsehoods of the Soviet Union, during the time of perestroika and glasnost, the fact that the Soviet Union used Hawaii for target practice on a missile; that is violating a treaty that the Soviet Union had signed. Now, I happen to see Dr. Fediay sitting right there. Dr. Fediay brought a distinguished Soviet citizen, I guess he was considered a Soviet citizen, named Alexander Solzhenitsyn, to my house. Do you remember that, Dr. Fediay?

Dr. FEDIAY. Yes, sir.

Senator HELMS. And we spent an evening together, and if anybody has any doubt about the duplicity of the Soviets, past or present, maybe we ought to consult Alexander Solzhenitsyn, who spent a good portion of his life in a concentration camp simply because he was trying to stand up for freedom. So this is what we are confronting.

But with all due respect to the New York Times and the Washington Post, all we hear about is what a nice guy Mr. Gorbachev is. Sure, he got out of that limousine down on Connecticut Avenue and shook hands. He has got the smile, but he has the iron teeth to which you alluded. I think we need to be awfully careful that we are not being snookered. And I think we are. I think what is afoot here is that the Soviet Union wants us to finance their efforts.

But let me move ahead, Mr. Chairman, and ask Ambassador Jordan, you are aware, of course, of the very serious reports on the deterioration of the situation in Peru. What do you consider to be the major threat to democracy in Peru?

Ambassador JORDAN. That is a very important question, and it links to my concern for the United States to be able to defend democracy and assist it in Latin America generally and obviously in Peru in particular.

One of the principal problems, it seems to me, and it relates in part to our discussion of an authoritarian regime changing, is the fact that even after you get substantial democratic changes in a

country, as you now have in Peru, you have established elected parliaments, there is an independent electoral system, the political culture remains very substantially authoritarian.

And, oftentimes, in the process of elections, you produce people who do not know how to work carefully with the legal structure of the countries or with the parliaments of the countries and do not know, really, a great deal about the protection of the independent economic well-being of the people of their countries. So that, what you often may have is that, even after you have had substantial changes in the structural appearances of a society, values and ways of doing things that continue the methods and ways of the past.

Now, in that context, part of your great danger is the, comes from elected officials who have authoritarian views toward the economy and may help induce radical disasters in the economic culture of the country and the economic well-being of the country, producing, as a result of that, a growing disaffection of the people with democracy because they think this is what democracy is all about.

What I am getting at here is I have encountered, as a result, for example, of some of the horrendous economic problems that have occurred in Latin America as a result of the return to democracy, the people themselves become hostile to democracy. And so, part of what happens is that there is not, in conjunction with your idea of a correct electoral process, an accountable permanent government to the elected officials and a legal order that works, they must also be defenders of the national economy of the people and not be so steeped in selfish rule for themselves that they let their people suffer horrible economic deprivation.

My wife, for example, is just back from Peru and one of the things that we have now started to support with our very small foundation is comodores, which are, we now have four of them in Peru, where you provide food for the people because the economic situation is so bad.

So, part of your problem as your threat is to go beyond the democratic election to inculcating into the idea of what democracy is, that there is a responsibility toward the economic well-being of the society. So, I would say that one of the fundamental threats is this continuing deterioration of the economy. It produces insurgencies.

I know you have heard and followed the Sendero Luminoso, the Tupaca maru, and the people become, even though they have seen an electoral process, if you do not talk about other components of what a responsible government is, you end up discrediting democracy itself. And so, we are not watching the rise of a very belligerent insurgency, the possibility of even more radical elements coming to power. And so, that is the general problem of the threat to the society as a whole if you do not have a more comprehensive view of what the democratic regime is, other than just elections.

Senator HELMS. That is precisely what we are seeing throughout Latin America and around the world. And these countries fall prey to those who are trying to move in. Dr. Staar, what are the relative functions of the CPSU foreign policy commission and the U.S.S.R. Ministry of Foreign Affairs?

Dr. STAAR. Well, Senator Helms, fortunately we have a statement on that from none other than Mr. Iakovlev, who heads the

commission, and he indicates that the Ministry of Foreign Affairs implements the recommendations that are made by the commission and approved by the Politburo. So, the foreign policy decisions would be initiated within the commission, approved by the Politburo and then implemented by the Ministry of Foreign Affairs.

So, this would suggest that Mr. Shevardnadze, even though he is a full member of the Politburo, is certainly not as important as Mr. Iakovlev, who heads that commission. And, of course, he is, as I said, the closest adviser to Mr. Gorbachev.

I might mention that this has not always been so because when Mr. Gromyko headed the Ministry of Foreign Affairs, I think the situation was probably reversed in view of his longevity and having served so many masters in the past and been foreign minister for such a long period of time.

Senator HELMS. Well, on September 30 and October 1 of last year, there was the introduction of six Central Committee commissions. Do you want to talk about that? What happened there?

Dr. STAAR. Well, the truth of the matter is we do not know very much about the Soviet Union. I am the first to admit that. There are various theories. We do not have records of Politburo meetings. We do know that Mr. Gorbachev has sent a proposal to the Politburo on restructuring the central apparatus. Up until that time, there were 24 different departments, several departments in a cluster were under a secretary of the Central Committee. And here, again, the interesting thing was that you had overlapping responsibilities. The same secretary might be involved in, or two secretaries involved in the same type of operation.

There is one theory, and I am passing it on as a theory because, as I say, there is no proof of this, but that an attempt was made to oust Mr. Gorbachev. And this was frustrated when Mr. Gorbachev got wind of it and apparently made a deal with his colleague, Chebrikov. Chebrikov was head of the KGB. Chebrikov ended up as the head of the new legal policy commission. But the KGB reports to the legal commission.

Now, as I say, I do not know whether this is correct or not. The Rand Corp. came out with a study authored by Jeremy Asreal in which he suggests that Chebrikov today is positioning himself to take over as General Secretary of the Communist Party of the Soviet Union, and that the KGB has always had much more influence than the scholarly community, by and large in the United States, has attributed to it. As I say, whether this is correct, we do not really know. But I think it is plausible.

Senator HELMS. One final one, and then I will quit. Iakovlev, am I pronouncing that right?

Dr. STAAR. Right. Iakovlev.

Senator HELMS. Why is he so anti-American?

Dr. STAAR. Well, Iakovlev is a product of the system. He was born in December 1923, so that would make him 65 years old now. He is older, of course, than Mr. Gorbachev. He fought in the Second World War, I think he was a company commander, wounded. He came out in 1946, he joined the party. And, beginning with that point, when he was 23 years old, he went to work for the Communist Party apparatus. In other words, he has always been a party functionary.

So, he is a product of the Stalinist system. Now, he spent 1958–59 at Columbia University, the first exchange program between the United States and the Soviet Union for university-level students. There are all sorts of stories about what happened then. There was a very good article by Bill Keller in the New York Times magazine section where Mr. Keller went off to interview various individuals who still remembered Mr. Gorbachev.

He has written at least half a dozen books, very anti-American. I have a quote in my paper, now, you do not recognize the United States from that quote. And these are fairly recent, recent publications. I think the man is an ideolog. In other words, he is hardline. If you read the articles that he has written for Kommunist, which is the theoretical journal, it comes out 18 times a year, you see where he is coming from. I mean, he is a true Leninist.

Senator HELMS. You also see where he is now.

Dr. STAAR. Where he is now.

Senator HELMS. Behind the smile.

Dr. STAAR. Right.

Senator HELMS. Right. Thank you, Mr. Chairman.

Senator MOYNIHAN. Thank you, sir, and I know you are going to have to leave and we appreciate your being here. Senator Biden.

Senator BIDEN. Thank you, gentlemen. I apologize for not having been here. I have been conducting a hearing all morning on international drug eradication effort. I hope we have more success in United States-Soviet relations. I would like to ask a little about Eastern Europe, if it has not been discussed.

Gentlemen, what is your assessment of the threshold of Soviet tolerance that we can anticipate in the next 3, 4, 5 years in Eastern Europe? And I would like you to, if you would, use East Germany, Poland, Czechoslovakia, and Hungary, acknowledging they are all different, as examples. How far is Mr. Gorbachev likely, in your view, to let each of those regimes go? Professor?

Mr. HORELICK. Let me try to start, anyway. I do not know that Gorbachev knows where the threshold is, and I suspect that he hopes that the discovery of it will not be tested. There have been some really remarkable statements on this question from fairly senior Soviet people in the Soviet Union. Their outstanding academic specialist, who, for many years, was a member of the Liaison Department of the Central Committee dealing with Eastern European countries, Bogomolov, recently stated not only that the evolution of Hungary into an Austrian or a Swedish model social democracy would be below the threshold of tolerance on the part of the Soviet Union but went on to suggest that even the neutralization of Hungary would not be a threat to Soviet security.

It is very hard now to imagine a repeat of August 1968, the Soviet intervention to end the "Prague Spring." That is to say, I do not believe that we would see a Soviet or Warsaw pact intervention into an East European country, that was reforming itself more or less along the lines that the Soviet Union itself is trying to reform now. Indeed, if anything, the pressure from Moscow is in the direction of pushing Eastern Europe toward that kind of reform.

I think it is a much more open question as to how much tolerance even Gorbachev would show toward an effort by any East European country to move itself out of the Warsaw Pact. But I think

it is unlikely, unless there is a radical discontinuity in Eastern Europe, that those Eastern European countries that are reforming would be so imprudent as to couple radical domestic reform with renunciation of the Warsaw Pact.

Specifically, I think in the case of Hungary and Poland, which are certainly the most reform-minded countries, it is unlikely that the leaderships in either of those countries that would combine domestic reform with moving out of the Warsaw Pact. The East German Communists do not seem of a mind either to reform domestically or to distance themselves very much from the Soviet Union, and the same thing applies to Czechoslovakia.

But I do think that short of the outbreak in East European countries, membership in the pact would likely be the issue that would pose the most severe threat Soviet intervention, and, in the end, I think that even Gorbachev's hand would not tremble.

Senator BIDEN. Ambassador Jordan.

Ambassador JORDAN. I look at this a little bit from the perspective of the study of regime transitions and their relationships to foreign policy alignments. That literature that is developing, although it is still more monographic than it is theoretically convincing, but I do think that what we do see so far from the study of regime transitions, that there are certain commonalities for those that are successful in their process.

One of those is that if the transition is done by an authoritarian regime of some sort that is gradually liberalizing itself, that transition, to be successful, favors or carefully favors the forces that are still in power as it eases its way toward liberalization. That is, it is more likely to move toward some sort of successful completion toward another, more open regime if it does not start out as a major threat to what is being transformed. If you look, just to give an example——

Senator BIDEN. That is the case in Hungary now.

Ambassador JORDAN. Yes. And if you look at it outside, if you look at the Spanish transition for something, it is done from above, from the monarchy and it is done, in effect, by the old party and forces and it is done step by step and very carefully and with the capacity to pull back as it gets toward lines that may trigger major problems.

So, I think one of the things we seem to see, in terms of regime transition, particularly from an authoritarian one, that it is an art and it is not something one deals with scientifically. One watches the steps that may be taken and they sort of feel their way over certain——

Senator BIDEN. It is not an art that East German leader Eric Honnecker is likely to be able to deal with well.

Ambassador JORDAN. Then in that regard, I guess, what I would say is what you would expect at the other end of this thing is the decomposition of alliance systems. That would be the worst way to start it would be to signal those kinds of implications. If those went and were up front, I think the likelihood of the movement against them rises dramatically.

Senator BIDEN. If I may interrupt, how much of what Gorbachev is forced to react to depends upon how well the statist regime in each of these countries reacts? In other words, in Hungary, obvi-

ously, we have had a situation over the past 15 years where there seems to be total, absolute adherence to any Soviet foreign policy, judgment, or decision in return for a freer hand domestically and that has worked, at least, relatively well, as I see it.

But what Gorbachev is saying by sending out a signal, is that the statist regimes themselves have to accommodate change. I guess what I am trying to get at is, is there a relationship between the ability of the regime in Czechoslovakia or the GDR to accommodate change and what would be allowed to be accommodated by the Soviets? Do you get what I am driving at?

Ambassador JORDAN. Let me guess a little bit. If I am wrong, correct me. What I think we are looking at is a combination of leaders arising who understand the need for change, which is one of the first steps in any transition. You start looking to see if there really are sensing that these pressures are underway and that if they do not get in front of them in a control, they will get away from them and either disrupt things and produce the kinds of interventions they do not want.

Now that is why you are looking in part at this leadership element. I see this in Hungary as well, as sort of recognizing that these forces are underway and the best way for them to handle them is for the party itself to handle it and be out in front. And that involves some liberalization of the economic and structural processes if they are to stay, if they are going to conserve their own position in them.

I am suggesting, in addition to that, that an awareness that you need to let it come along slowly that way, is that part of the art from the outside.

Senator BIDEN. The art from the outside that I have a dilemma understanding is, on the one hand, as I read it is that Gorbachev is saying to the GDR and Czechoslovakia, "Things are changing. You're not; you better," without defining what that is.

And there seems to be little realization, in my opinion, on the part of Honnecker, for example, that there is a need for change and the genuine need for that internal change is being imposed externally. It is a strange occurrence. In Czechoslovakia, in the Prague spring, you had Dubcek saying, "All I am trying to do is what you said you really wanted me to do but you never really said you really wanted me to do." But this time you have someone saying, "Do it."

And Honnecker is, among others, is saying, "No, that is not a good idea. You are barking up the wrong tree. You are going to cause me, you are going to cause this regime real trouble."

Ambassador JORDAN. I think you are putting your finger also on their geopolitical position as well. It is where they are geopolitically that also——

Senator BIDEN. The last point I wish to raise, is much of a relationship is there between the geopolitical importance to the Soviet Union and the East bloc nations and the willingness of the Soviet Union under Gorbachev to allow and/or insist on change? The extent of this change will, of course, depend on which end of the spectrum these nations are at the moment. Is Moscow going to be less likely to take risks with regard to the GDR than with Hungary?

Ambassador JORDAN. I am inclined to think yes, because that is so close to, I mean, that is Germany——

Senator BIDEN. Now, which takes me to Poland. Poland has historically been a country which, in and of itself, has not been the bane of Moscow's existence as Germany has, but Poland has been the cause of, from the Soviet perspective, a significant portion of their vulnerability.

Polish leader Jaruzelski seems to be—an awful thing to say—almost the right guy at the right time in Poland. In the model you have suggested, as you lift the hand of repression, how slowly and how much do you threaten the hand that is being lifted? It depends upon how much success you will have, but I am asking you to crystal ball gaze a little bit about what you think is going through Gorbachev's mind or the Politburo's mind now about what is happening in Poland.

Ambassador JORDAN. Well, I——

Senator BIDEN. Let us face it, fellows, as expert as you all are, you are still guessing. None of you know what you are talking about in terms of what the future is going to be, nor do any of us. An expert is anyone from out of town with a briefcase, you know. So, with all due respect, you give great insight, but we are all guessing here about what is likely to happen. We have not been able to predict very well in the past. So, do not hesitate to guess even more than you usually do.

Ambassador JORDAN. Well, my guess is that they would foresee an evolution, a desirable evolution where it would go as, they would ease the social pressures domestically, they would handle, the economy would work better, the party would be relegitimized as much as possible, and the west would begin to pick up the economic burden for them, and it would not disintegrate further than that.

Senator BIDEN. Thank you. That is exactly what I was looking for and I did not mean what I said in any disrespect.

Ambassador JORDAN. I am glad you said that before I said it.

Senator BIDEN. I do not want you to hesitate to go a little beyond what we ordinarily do. Doctor, would you respond to the 87 questions that I just posed?

Dr. MANDELBAUM. I will respond with four points, Senator. First, I had the opportunity to visit Poland and Hungary at the beginning of last month with a group from my organization, the Council on Foreign Relations headed by Peter G. Peterson and David Rockerfeller, and we were able to meet with the leaders of those countries and the leaders of the opposition, and it is a remarkable period in those countries. I would say it is a revolutionary period, with perhaps the most important developments in Europe in the last 40 years.

Now, as for the threshold of tolerance, it is certainly much higher now than it ever was before. I would associate myself with the analysis of my friend and colleague, Dr. Horelick. I think the only taboo at this point is leaving the Warsaw Pact, and I do not think that the opposition in either of these countries is going to be foolish enough to broach that issue while internal change is going on.

Now, I would put Gorbachev's instructions to the leaders of Eastern Europe somewhat differently than you did, Senator. I think what he said to all of them, in effect, is, "Keep the lid on. I am not going to be particular about how you do it. I just do not want any trouble while we change internally. If you keep the lid on by sweeping reform, we will tolerate it. If you keep the lid on by repression, as the East Germans and the Czechs have done, we will tolerate that, too."

Eastern Europe is on its own now. The individual ruling parties have wider latitude than they have ever had before, and they are going in different directions according to their own particular tastes and needs.

Let me make two more points. First, in Poland and Hungary and, I think, in each of these countries, the political future for the moment does not depend, as it has in the past, crucially on the Soviet Union. Internal forces are at play here and the Soviet Union is off to the side, not exercising the kind of compulsion that it did for 40 years. So, in Poland, there is a real drama, a real political struggle going on, but the Soviet Union is not a major actor at this point.

Finally, to your question about the difference in the geopolitical situation in each country and the impact on Soviet tolerance, I have no doubt that there is a crucial relationship between those two factors. Therefore, I think Hungary is in the best of all possible positions because it is the least important to the Soviet Union. Poland is extremely important for all kinds of geographic, military and historical reasons, and, therefore, I myself am rather surprised at how far Gorbachev has been willing to allow Poland to go.

But in my opinion, East Germany is the most important country of all for strategic reasons, and it would be important to the Soviet Union even if there were no such thing as Marxism-Leninism. Therefore, I think that reform is going to be most difficult in the GDR. After all, in each of the other countries, the question of reform, of liberalization, raises the issue of the legitimacy of the regime. In the GDR, it raises the question of the legitimacy of the country itself. And, in doing so, it raises once again that perennial issue over which two world wars have been fought, the German question.

Senator BIDEN. It may be an issue we can unify on. Dr. Staar?

Dr. STAAR. Senator Biden, first of all, I would like to, just so you do not think we all are in agreement here on this panel, I would like to disagree with Professor Horelick where he cited Oleg Bogomolov, who is director of the Institute for the Economies of the Socialist Countries, meaning Communist-ruled states.

This was in Budapest and it's true, that is what he said. He could envisage Hungary becoming a Finland or becoming neutral, withdrawing from the Warsaw Pact. On the other hand, the very next day, a much more important person, the Prime Minister of the Soviet Union, Mr. Ryshkov, contradicted him. So whom do you believe? Mr. Ryshkov, who is a member of the Politburo, or Mr. Bogomolov, who is much less important?

Senator BIDEN. That is an interesting contradiction, though; isn't it?

Dr. STAAR. It is, it is, right. Now, the thing about invasion, now, that is, again, we cannot predict whether the Soviets will invade. It depends on the circumstances. In one case, the most recent case, they did not have to invade.

They had an 800-man military advisory group in Warsaw, Poland, headed by a Soviet general by the name of Shcheglov, and it was this military advisory commission that drew up the plans for martial law. And martial law was proclaimed on December 13, 1981, with the help of the Soviet Union. In other words, the Polish Armed Forces occupied their own country. This gives you some idea of what kind of a man you are dealing with when you are talking about General Voyczekarozevski.

Now, as far as change is concerned, I think there are big differences in those four countries that you mentioned, Senator Biden. In the GDR, Erich Honnecker is probably about 77 years old now. It will depend on who succeeds him, really, before we find out what is going to happen in East Germany.

As far as Hungary is concerned, well, let me mention Czechoslovakia first. Husak was replaced, and, again, people thought, well, Husak, who had been the tool of the Soviet Union ever since Dubcek was displaced in the invasion of 1968, who replaced him? Well, it was Milos Jakes, and Jakes is not a young man; he is in the fullness of his life now, he is only 65. And Jakes was the man who sat on the commissions that looked at the party membership cards of all of the KSC members after the invasion. And 500,000, half a million members of the Czechoslovak Communist Party were expelled by this commission under Jakes because they had supported Mr. Dubcek. So, there is no change there, actually.

As far as Hungary is concerned, here, again, a younger man came in to replace Jamos Kadar, a man named Grosz. It is very interesting because there were high hopes about him. Now, apparently, there is a split in the Hungarian party; he does not want to go as fast as others want to go. And there is even talk that there will be two Communist parties in Hungary; it may happen, it may not happen.

But let me just throw in something here. A Professor Gati of Union College and Columbia University speaks Hungarian. He was in Budapest recently and he talked to this man Grosz, and he said, "Mr. Grosz, tell me now what influence does the Soviet Union have?" And this goes to the heart of your question with regard to Hungary. And he said, "You know, that is an interesting question. I called Mr. Gorbachev the other day. I had a very serious problem that I had to solve and I asked for his advice, and he said to me, 'Follow your own conscience.' "

So, I think this supports some of the contentions that we have heard here that these regimes now are more or less doing what they want within certain limits, however. One of the limits was mentioned, membership in the Warsaw Treaty Organization. Another one, probably, membership in the Council for Mutual Economic Assistance. And, of course, the third and most important one is that the Communist Party remain in power. Now, they can do that in different ways.

In the case of Poland, there will be elections. Supposedly the Communist Party will only have 40 percent of the seats in the

lower house. These elections are to take place in June. So we can envisage here a tripartite control system where the party, even though it does not have a majority of the seats in Parliament, still it controls the military, it controls the secret police, which, of course, are both very important institutions. And then you will have, of course, Mr. Walesa, who is not even running for Parliament, but his organization, Solidarnosc, and then the third leg, of course, will be the Roman Catholic Church.

Senator BIDEN. My time is up. Well, I do not want to keep you here any longer since I was late, but I have some more questions, if I may?

Senator MOYNIHAN. Could I ask one?

Senator BIDEN. Sure. Please. No, you go right ahead.

Senator MOYNIHAN. Two things, one is just to say that I take it the doctrine that an authoritarian regime can become a democratic one, but a totalitarian regime can never become an authoritarian one is beginning to fray at the edges. Would you not say so? These totalitarian regimes seem to be reducing themselves to a more familiar authoritarian pattern.

Would you say that, or would you say not?

Mr. HORELICK. I am going to start at the other end of the table, and that way I get a chance, once in awhile, to exercise the right of rebuttal. [Laughter.]

Dr. STAAR. We are talking now about Eastern Europe, Senator Moynihan?

Senator MOYNIHAN. We are talking about political science.

Dr. STAAR. Well, if we stick to Eastern Europe, I think, obviously, something is happening there. There is movement. Much of this movement, though, we must, I think, remember past history.

What has happened in Poland would not have happened, if you did not have this rash of strikes that almost brought the government to its knees. And then, martial law. And then, subsequent period, seven years of when solidarity had been banned. And then, again, the strikes that took place, which prompted the round table discussions, and so on and so forth.

I do not see at this point, that these regimes have changed. Now, there is promise in the future. That is true. And maybe this will happen.

But, as of now, nothing has really happened. The Communist parties are in control.

You have in four of these countries——

Senator BIDEN. Could you have possibly envisioned what is happening now, right now, as limited as you may think it is? Does it not surprise you?

Three years ago, if we sat here and told you it was going happen. I did not know it was. But, if I told you it was going to happen, what would you have said?

Dr. STAAR. I think it would have surprised everybody.

Senator BIDEN. But, you would have been thunderstruck, would you have not?

Dr. STAAR. Well, maybe not thunderstruck.

Senator BIDEN. I remember dealing with you on MBFR, and I have great respect for you. I remember your views, and I think it

would be accurate to say you probably thought it would take an ice age for this to happen.

So, things are changing, right?

Dr. STAAR. I said they are changing.

Senator MOYNIHAN. Let me ask him a more specific question, which is and yet, a little odd.

We have been hearing in international organizations in, sort of, informal statements, before seminars, and most conspicuously, in a formal address by the Foreign Minister, Shevardnadze, in October, in Paris, to the UNESCO House of Permanent Delegates, the first Soviet Foreign Minister ever to go there. And the speech published in Moscow News, in which he laments the decline of the, the crisis in UNESCO, that was occasioned by the departure of the United States, of Great Britain, and Singapore.

And he says, "As we delve into the roots of the trouble, we do not try to shift the blame on others. We submitted to the influence of confrontation, and adopted its spirit as we thought, as we sought to repulse ideals alien to us. The exaggerated, ideological approach undermined tolerance intrinsic to UNESCO."

At the U.N., the informal seminars, they have been saying the same thing. "Well, yeah, in the 1970's we tried to break this place up."

And now they are saying, "Well, we have quite changed." But, they say things on an order—first, they started by criticizing myself. They say, "We refuse to act as judges, and we start our criticisms with ourselves. We call on everybody to learn the lessons of the past, as UNESCO revival is starting."

Then, they claim about their new articles, their basic principles of these—free choice, which implies that one must not claim the right to final judgment, nor impose ideas, doctrines, or models of development.

Now, you cannot be a Marxist, and say that. You know, we do not have to go through this. If you think you have free choice, then you just have not studied history properly. But, they go on about that.

They go on a political and cultural pluralism. This is Shevardnadze, which implies that no commitment to one's belief can anymore justify their messianic promotion. No commitment to your own belief can justify messianic promotion.

Peace through wisdom, not through force of politics, not politics of force, supremacy of international law in international affairs.

When Dr. Kennan was here, I asked him at the end, I said, "You know"—he had been very critical of Woodrow Wilson at a certain point, in his career, in Kennan's career, but the constant references to 1919 in his testimony before us, and Versailles, and so forth, I said, "You know, is there—are we not to consider at some level returning to the Wilsonian enterprise, which was the notion of the world order, had some legal status, and some legal authority?"

There is Shevardnadze talking about it, and, of course, they have said about they will go the World Court, and so forth.

Is this a time to think back to those earlier propositions?

And Ambassador Kennan said, "You know, I now think, well, I have changed my view on Wilson, and I think he was far ahead of his time."

I am not sitting here as a Wilsonian, naive, trying to say, can we have a parliament of men?

But, if we are not going to be, if our relations are not going to be determined by the iron necessities of a cold war, where one regime claiming to be the next stage in history, said, "No claims of the previous stage can exert themselves on us, like international law. They are now saying that differently.

Is there some aspect in which our thinking should begin anew?

Horelick, you are first. You raised your hand.

Mr. HORELICK. Let me take a crack at that in the following way.

I think that the debate as to whether Gorbachev and Shevardnadze and Iakovlev have undergone a philosophical conversion to altruism, or to Wilsonianism in theories of international relations, is either beside the point, or simply will lead us into a blind alley.

It seems to me that what has happened, which is important for us, is that there has been a redefinition of Soviet interests by certain parts of the Soviet elite, who happen now to be in power—Gorbachev, Shevardnadze, Iakovlev and company. Incidentally, I do not at all see Iakovlev, as Professor Staar does, as a hardline ideologist of the old school. On the contrary, I think Iakovlev, however important these anti-American strains in him may be, is by far, the most radical revisionist, ideologically, in the Soviet leadership.

I think these leaders have concluded that first, that clinging to old dogma was getting in the way of reforming the Soviet Union domestically.

And second, that clinging to dogma was promoting the self-isolation of the Soviet Union internationally. On both counts, internationally and domestically, a rigid, ideological stance, was self-defeating.

Whether these old precepts of Marxism-Leninism, have been replaced now with some completely thought-out alternative belief system about international affairs, I frankly, am quite dubious.

I think that the Soviet turn to, rediscovery of universal human principles, the assertion that universal causes are more important that the class struggle, the rediscovery of the United Nations are still largely instrumental. But they are favorable, and desirable from our point of view; they give us things to work with, standards against which to demand Soviet performance.

Senator MOYNIHAN. Is it not the case that, say, 50 years ago, a Marxist analyst would say, international law, it is the law of the victors, and it makes no claim on us.

Mr. HORELICK. Absolutely.

Senator MOYNIHAN. If you start saying it makes a claim on us, maybe it is the instrumental—does that make any sense to you, Dr. Mandelbaum, instrumental in the sense of we are one of them?

Mr. HORELICK. Michail Suslov would be turning over in his grave at an incredible rate of speed, were he able to read the daily Soviet press today.

Senator MOYNIHAN. Right. Right. Dr. Mandelbaum.

Dr. MANDELBAUM. I think it is right, Senator, to say that words mean something, especially words coming from the people from

whom they are coming. I must say that I am skeptical about the prospects for public international law in the best of circumstances, perhaps because, unlike you, I have not had the benefit of being educated at the Fletcher School of Law and Diplomacy.

Senator MOYNIHAN. That is a defect.

Dr. MANDELBAUM. I am a prisoner of my guild, which is political science, and we tend to take a dim view of the international possibilities of law.

Nonetheless, I think it is true that the chief obstacle for 40 years to the creation of a more legally oriented world has been the Soviet Union. And insofar as the Soviet Union is changing, it is certainly appropriate to revisit the question of the extent to which Woodrow Wilson's vision could actually be implemented.

But, let me make two further points. First, let me recall a stricture of Dr. Horelick in his opening statement, which I am sure no one here would disagree with, but which I think is relevant. And that is, we have to proceed step by step. We cannot construct a grand cathedral of legal procedure all at once. We have to test the Soviet Union, and ourselves, and the rest of the world on specific issues.

Second, my own view is that the important frontier for the normalization of the Soviet Union is not international public law, but private commercial law.

It seems to me that what we ought to be interested in, what we ought to be watching, is the integration of the Soviet Union into the international economy, the international liberal economy, with its various rules, procedures, and organizations.

Now, that opens up a huge series of questions. I do not think we are even on the threshold of that yet. But, my own personal predilection is to say that if we are really concerned about a truly benign Soviet Union, that is the direction in which we ought to look, and that is the direction in which we ought to hope it is possible, ultimately, for the Soviet Union to move.

Senator MOYNIHAN. Could I make one point, before turning back to our chairman, which is this. When one raises the subject of international law, you tend to be greeted with the notion of that is really quaint, how nice of you, you, obviously, are a nice person, but not a very serious person.

I spoke at the Council in Foreign Relations in 1979, the last time. I remember saying, you know, it seemed to me, and that was the last time I was invited. [Laughter.]

But I said:

> I would like to raise the proposition that our national elites, the people who found the Council of Foreign Relations, use to think we are quite committed to the idea of law in the affairs of nations, as a basically defining structure.
>
> I believe we use to think that, and I believe we no longer think that.

So, this raises the question of what do we think, and I never had so hostile a reaction to an audience in my life.

I have written that if they practiced defenestration in the Harold Pratt House, I would not be around to tell the story. They were furious. [Laughter.]

And somebody said, "I thought you were defending the Vietnam war." I was just asking, "We use to think that, and now, obviously, we do not. What do we?"

And if do not think that way, what do you think? Ambassador Jordan.

Ambassador JORDAN. Senator, I find particularly interesting your observation, because I am from the Woodrow Wilson Department of Government and Foreign Affairs. And I think it is quite pertinent to raise the importance of Woodrow Wilson.

I would make one caveat. I think that sometimes his support for democracy and its regime implications, was associated with an American intervention over recognition. It was——

Senator MOYNIHAN. He went to war everywhere. There was no place he did not go to war. I do not think he went to war in Australia. That is not proven. There is just no record of it.

Ambassador JORDAN. And also of a recognition policies, and this sort. But, looked at in the context of the Democratic regime that he supported. I think that is revolutionary, and you are watching that impact on the world, and that kind of imitation.

And I think if your point, and I believe that is what you were getting at, from listening to your observation. If we are not, indeed, having a revolutionary impact, in terms of this.

The way I read, for example, some of the Soviet writers, is what has had an enormous impact on them, was the role of the U.S. Congress in the control over U.S. policy. One of the things——

Senator MOYNIHAN. Are you saying that they found that a restraint?

Ambassador JORDAN. A restraint. It is explicit. And they are saying—it is absolutely explicit in there, and it is a very interesting development that they are saying that the United States is not threatening, because of the structural nature of the democratic regime. Some of them. Not everybody.

Senator MOYNIHAN. For the benefit of Senator Biden, who had to be chairing his own committee, you were saying that in that step-by-step prudential, you have all used many of the same words, measure, you would be a lot more, you would take a lot more risks, as it were, or more initiatives with the Soviet Union, when they appear to have developed some structural changes that limits the advantage they might take, if they——

Ambassador JORDAN. Because they admit it themselves. They are admitting it themselves——

Senator MOYNIHAN. And they are now saying this?

Ambassador JORDAN. That this is true and exists in the United States. The United States is not threatening. If we are not to be threatening, we must do so as well.

And, therefore, your policy objective is assisting precisely those forces, and that is what we get, and that is the parallel to me, clearly, in the sustaining, the democratic regime in Latin America, as well. What you find is that these processes are all reversible, even after they get fairly far advanced.

And so we become a much more conscious activist, and we can work in an extraordinarily more bipartisan way, to implement this.

I am sure Senator Biden does not recall this, but we spoke together on the narcotics problems, and you were interested in——

Senator BIDEN. I do remember.

Ambassador JORDAN. And we were quite interested in how we would work together, and it went beyond just eradication, and into

the protection of the legal systems, themselves, of democratic regimes that could be corrupted.

Senator BIDEN. That is just what we left discussing for——

Ambassador JORDAN. So, the thrust of my point is, that you, well, that this is what is revolution, and this is what Wilson was about as a revolutionary influence, rather than some of the practical elements that got him in trouble. These are the interventions and the rest.

And so, I just want to associate myself with that understanding of Wilson.

Senator BIDEN. Can I extend that a little bit, to be a little more mundane—as a policymaker, assuming we are in the position to make policy. We all know that Congress and the Senate do not make policy.

To what degree is Moscow's decision to accommodate change in Eastern Europe related to the fact that the Soviets no longer believe the United States is a direct threat?

Ambassador JORDAN. That is right.

Senator BIDEN. And if that is the case, are they now willing to change their thinking about Europe?

They seem to be, if they have not already, moving into a defensive stance. They appear to be entertaining a change in military doctrine, from one that has a significant, offensive capability in Europe, to one that may be reconfigured in a way that reflects an overall defensive notion, as I read it.

And you are suggesting, Mr. Ambassador, that they need only to be defensive from this point on. And the degree to which they are required to have a defensive configuration is not as urgent, nor as significant as what they thought 2, 5, 8, 10 years ago.

I would like you to speak to the question whether they are changing their thinking, in your view, about their military posture in Eastern Europe?

Ambassador JORDAN. I would say some are. There is an element that is so thinking, and how broadly that goes, is the question of establishing standards and criteria.

We have clear evidence, some do so think. How far that is, we do not know, and it would have to go to a certain—get to a certain point, before you would say it was in place. But, some now, understand it, because it is in their press.

Senator BIDEN. I remember being with Dr. Staar—he may not remember—much earlier in the MBFR days.

Dr. STAAR. I remember, Senator.

Senator BIDEN. Well, I am flattered. There is no reason that you should. There were so many people you saw from this body during that period of time.

But, the question then was what should be our strategy? What initiatives should we be taking? What do we, the United States, and NATO, want to see Europe end up looking like 2, 5, 10 years from now, in terms of the military posture of both Eastern and Western forces.

What disturbs me now, after all the time, and the hours and hours I have spent dealing with our NATO allies, and in this committee and with the administration on this question, is that we do not seem to have a very clear picture of what we want NATO to

look like, what we want the Warsaw Pact to look like, what we want Europe to look like in military terms—both East and West.

And the reason I bother to pursue the question about whether or not there is thinking on the part of the Soviet planners about moving their military force into a basically defensive, rather than offensive posture, impacts a lot upon what we think we can accomplish—what we think we should attempt to accomplish in the step-by-step process, that Professor Horelick apparently mentioned earlier on.

So, what should we be doing now? What would you advise our folks in Vienna who are getting ready for, and undertaking the CFE talks now?

Would you be thinking big and bold, and pursuing significant changes in the forestructures, with the idea that they may very well be greeted with some prospect and promise of success. Or, would you say, which we basically said in the past, let us not think very big. Let us not think very boldly.

I am not talking about acting rashly. I am talking about proposing agreements that are relatively bold.

How would you be approaching the talks, in more general terms, rather than specifically, how many units, how many men, what would you change?

Mr. HORELICK. Well, let me say two things about that. First of all, I think there has been an important change in the way the Soviets define their security position in Europe, which partly has to do with a lower perception of threat from the West.

I think, even more than the United States, a generational change in the way some Soviet leaders view the Germans, has been very important in this respect. The image of potential revanchist Neo-Nazis has given way, I think, in the Shevardnadze-Gorbachev generation, to a much more realistic view of West Germany, which also sees its vulnerabilities and weaknesses.

Second of all, I do not think that the Soviets have abandoned all interest in a military capability, which conceivably, could conduct large offensive operations.

I think what they have seen was that the cost of maintaining the edge that they had in conventional forces all of these years, was simply incommensurate with the political and military benefits they derived from it.

With all of the investment that they made, I do not think they have ever believed that they were in a position, if war broke out in Western Europe, to conduct it without unacceptable fear of nuclear escalation, on the one hand. I do not think they ever felt that they had achieved the capability to give them a high confidence, rapid, conventional, offensive victory in Europe before NATO could get its act together.

And, therefore, that maintaining those excessive forces was simply not yielding, either military or political benefits to justify the crippling costs.

I think the debacle of INF demonstrated that to them, with respect both to their theater nuclear capability, and their conventional capability. Their superiority failed to gain for them the political difference they sought.

But, this does leave us facing a dilemma. We actually have gotten closer, it seems to me, in the opening CFE positions on the two sides, than we could have expected last year. Both sides proposals call for the Soviet side to make very, very radical reductions on top of the ones that they have pledged to make unilaterally. The Soviet formula of reductions, 10 to 15 percent below NATO levels, would have the Soviets giving up an enormous number of tanks, artillery pieces, and so on.

It is true that the Soviet proposal includes some categories that we do not want to negotiate, at least not for the time being. But the Soviet proposal, in its own right, if implemented would constitute a major change in the nature of the military balance in Europe. And the NATO and Soviet proposals, would call for reductions down to 10 to 15, percent respectively below present NATO levels are close enough, so that we have, between the Shevardnadze phase 1 proposal, and the present NATO CFE proposal, the makings, for a serious negotiation. And concluding such a CFE agreement would be a very, very substantial accomplishment and would be welcomed universally in the West.

I noticed, however, that when they possibility of much more substantial mutual reductions that would cut heavily into NATO as well as Soviet forces, is discussed, such as a reduction down to 50 percent of existing NATO forces, most members of the Western defense and foreign policy establishments are aghast. These are serious military concerns, which have to do with minimum forces necessary to defend any line in Europe. Related to this is the question of the minimum forces required to assure the cohesion of the NATO alliance.

And in the back of the minds of many of our allies, and I think it should be in the back of our minds, too, there is a concern that the Soviet Union, by virtue of its sheer size and weight enjoys certain inherent advantages, in almost any political configuration in Europe. There is the inherent advantage of proximity. The leader of the East is close to the heartflame of Europe, while the leader of the Western alliance is far away from Europe.

And, so long as there are important political and systemic assymetries between the democratic countries of NATO and the Soviet Union, there will be an inherent advantage for the Soviet Union in remobilization.

So until such time as Soviet leaders are politically constrained, in the ways that we were just discussing, until such time as the military priority is eliminated as a result of fundamental economic and political changes in the Soviet Union, there is always going to be that gnawing concern in the West about reversibility.

For the time being, therefore, as we monitor this process of political and economic change in the Soviet Union, it seems to me that, no particular Western military response is required with respect to the unilateral reduction announcements by the Soviet Union.

But I do believe that the Shevardnadze proposal, the phase 1 CFE proposal, merits our most serious consideration, and that the question of categories, of whether aircraft should be put on the table or not, and the difference between 5 versus 10 and 15 percent reductions below NATO levels, ought not to stand in the way of opening a really serious dialog, which could result in a very signifi-

cant, and I think, assymetrically advantageous agreement to reduce conventional forces in Europe. Such an agreement would be eventually compatible with our existing alliance arrangements and with NATO's strategy of flexible response.

Ambassador JORDAN. Senator, I think I share the spirit of your observation. What you are saying is, that we should think big, we should have a vision about what Europe is going to look like, so that we are tailoring the steps we are taking there, in some sort of coordination with that vision.

I think the vision should be, that both the United States and the Soviet Union do not need to be squaring off against each other in Europe, in that we would be seeing eventually Eastern Europe being able to have perfectly normal relations with Western Europe, and vice versa, with the ultimate vision that Germany could become a reunited nation. Something that they aspire, I think, to on both sides. And that we would have that sort of perspective.

I think our steps should be small, however. I think the ways you would talk about implementing such a vision would require very careful consideration.

But I do believe, what I think what you are driving at is, then should we not begin to be thinking about——

Senator BIDEN. Let me be more specific. I am not suggesting that we should do anything based upon the verbal assertions of what the Soviet Union says it is going to do, or would like to do.

But, what I have found somewhat disturbing is that after spending a great deal of time on this one, specific issue—whether speaking with the high-level group, or with our own military personnel assigned to NATO, no one could answer the following question.

Has anyone calculated what would be the optimum configuration of NATO and Warsaw Pact forces at the lowest aggregate number? And nobody had done that.

What they talked about all the time with me about is what they thought the Soviets would, or would not be willing to do, rather than what ideally would be the best place for us to be 1, 2, 3, 5, 7, or 10 years, down the road.

And so we arrived at, what is, obviously, a compromise position, understandably borne out of political necessity from dealing with the Turk's problem of making sure that they are not left dangling, and the German problem of dealing with their increased, paranoia and schizophrenia, both, at the same time. This is understandable, in my view, if you look at the generational changes taking place there.

And we end up with 95 percent of our current conventional force levels—not as merely a negotiating instrument but essentially because that is viewed to be the optimum level.

And it worries me a little bit that we are not thinking big. I do not mean "big" in the sense of acting unilaterally or moving ahead based on trust, or an assessment of what we think the Soviets want.

But think big in terms of what we think NATO is going to be 10 years from now, 15 years from now? And we are not doing that, in my view.

And the reason why I think we are not is because we are still fumbling around with whether or not we think Gorbachev "means

what he says," rather than whether he means what he says and what is the best position we can arrive at? What is the best, not only bargaining stance, but what is the best end result we are looking for. And that is the part that disturbs me, even about Eastern Europe, generally.

It may be preposterous to suggest that someday, in the near term, we can even contemplate Hungary having the status of Austria or that Hungary may be outside the Warsaw Pact.

But I do not know anybody in terms of policymakers, who is thinking in terms of what we should be pushing toward, and how we should be doing that.

There is a debate here in this committee and in the country whether or not we should do nothing. Let us just let Gorbachev go off and do what he is doing, and we will just sit there.

And the reason why Gorbachev is doing what he is doing, is because NATO works—40 years has proven NATO works. Therefore, that is why Gorbachev is doing what he is doing. And the best thing for us to do is just sit back, and see where this all takes us. Let us watch him unravel chains, redeem himself, become a devil, or whatever.

And it seems to me that this is the first debate we have to win or lose. Do we do something? Do we take any initiative on anything relating to what Gorbachev is saying and/or doing.

I find it somewhat frustrating, but to use a trite expression, we do not think big enough these days.

Senator MOYNIHAN. Well, we will see if they can find an answer. It is a good question to end up on.

We have kept you a long time, and let us hear what you have to say.

Dr. MANDELBAUM. Well, let me respond in scatter-shot fashion. I certainly agree that we ought to think about what we want. There is an old saying from the Talmud, that if you do not know where you are going, any road will take you there. So, if we do not have any goals, then almost any policy will do. Well, clearly, that is not the case.

On the subject of the optimal forced balance in Europe, I doubt that anyone will be able to propose a platonic ideal, of force levels on which we could all agree. Or, if this exercise were undertaken, there would be different suggestions, and it seems to me that a Western position is inevitably going to be the result of negotiations among the various parties to our coalition, because we do have a coalition.

But I would make one general point——

Senator BIDEN. I have got to stop you there. We have never, never arrived at a conclusion in NATO about the United States pushing hard, laying down a predicate, and pushing it. Never, that I can think of.

Dr. MANDELBAUM. Let me suggest that if, and when, we decide to push, one principle that ought to govern our deliberations, and our decision, is that the necessary level of force in Europe depends upon the political situation in Europe.

Senator BIDEN. I agree.

Dr. MANDELBAUM. And, therefore, Mr. Gorbachev can lower our requirements for force, by continuing with the foreign policies that he has adopted.

Senator BIDEN. But what about for the foreign policies already adopted. I mean, I sit with the permanent representatives of every other NATO countries and they turn to me and say, "Look, what does the United States want? You have got to lead."

I mean, go over, by yourself, without the delegation of the rest of the council, and wander around Brussels, and ask them. I will be surprised and shocked if you do not come back having found them saying, "The United States has to lead." There is no movement.

Dr. MANDELBAUM. Well, Senator, I certainly do not mean to come here and denigrate the importance of American leadership, nor do I come here to make a case for, or indeed, against the administration's policies, as we have seen them so far. But let me offer one final thought on this general subject.

I know there is dissatisfaction in Europe, and in here, with the slow pace of American policy—with the reluctance of the United States to lay down markers, to formulate policies, to set goals.

My thought is that I, personally, am not as worried about that as some others. And I am particularly not worried about it on military issues, for the following reason.

In the old days, the only real arena of engagement between the United States and the Soviet Union, was military. Arms control was the only game in town, because on political and on economic issues there was nothing to talk about. There was no room for compromise. Now that is no longer true. And it seems to me that the arms negotiations no longer have to bear the entire weight of the Soviet-American relationship, and they should not have to bear that weight.

I think that we ought to be conservative on military issues. If the military relationship lags behind the political relationship, it seems to me that is not such a bad thing.

Military deployments are not easily reversible on our side. And so, while I do not think that we ought to be dragging our feet, it seems to me that what some would regard as undue hesitation and reluctance, may, in the end, turn out to be prudence on our side.

Senator BIDEN. My worry is, and I will end with this. My worry is not that we are in a position where the bilateral relationship between the United States and the Soviet Union, is going to be carried on the back of arms control.

What I am worried about is that, just as the dimension of the relationship between the United States and the Soviet Union is changing, so are the dimensions of the relationship between the United States and Europe.

And what is happening now is a little thing called Europe 1992, and some significant consequences that I predict, and will flow from it. Many good, most good, I hope. Some are going to raise considerably thornier questions than we have had to deal with in the economic relationship.

And I see the impact of our conservatism with respect to the military balance as having significant political and economic impacts in Europe.

The place where we are going to have real problems is not the failure of the United States and the rest of the NATO countries to agree on a particular force configuration. Rather, it is going to come if we do not come up with something that is defensible and articulated in a way that suggests that we are as interested in change as the Soviets to a generation of Europeans that are wondering whether or not we are.

It seems to me that what is going to come about is that some action will be taken on the economic front in Europe that is going to produce a reaction here on the military front.

You are going to see this U.S. Congress responding to actions taken by the European community that Americans dislike, by suggesting, "Bring the boys home."

You are going to see an increasingly, appealing, demagogic platform that argues there have been too many troops there for too long, we have a serious budgetary dilemma, the Europeans do not want us, or like us anyway. We are being browbeaten. Let us unilaterally move on. That pressure is going to build here, absent the United States, beginning to articulate a policy that communicates to Europeans that we do have a vision. And it is one that is not merely reactive to what Mr. Gorbachev has to say or do. That is my concern.

Senator MOYNIHAN. Well, sir, and that is why these hearings, as you may well know, are underway. We are deeply in the debt of you gentlemen.

Professor Horelick had to leave. We have run well over our time, as a response to how helpful you have been. We consider you now, resources, for the future.

And we want to thank our everpatient stenographer, thank all our staff, and we will call this third of our hearings to an end. Thank you all very much.

[Whereupon, at 3:20 p.m. the hearing adjourned, to reconvene at 10 a.m., May 3, 1989.]

HEARING #4
EAST-WEST ECONOMIC RELATIONS

WEDNESDAY, MAY 3, 1989

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met at 10 a.m. in room SD-419, Senate Dirksen Office Building, Hon. Claiborne Pell (chairman of the committee) presiding.

Present: Senators Pell, Biden, Sarbanes, Robb, and Pressler.

The CHAIRMAN. The Committee on Foreign Relations will come to order.

Our committee today resumes a series of hearings on the future of United States-Soviet relations. We began these hearings a month ago with testimony from Ambassador Kennan. The second hearing of the committee focused on recent political developments in the Soviet Union. In the third hearing, the committee discussed with Soviet experts the implications for the West of Mr. Gorbachev's initiatives on Soviet foreign policy.

Now today in its fourth hearing the committee will receive testimony from experts on the subject of East-West economic relations. These witnesses will testify in two panels, first dealing more broadly with the Soviet and East European economies, their potentialities and their liabilities and the options of Western policy, and the second panel will focus more specifically on such aspects of East-West trade as joint ventures and technology transfers.

The first panel today consists of Dr. Ed Hewett of the Brookings Institution; Dr. Jerry Hough, director of the Center of East-West Trade, Investment and Communications at Duke University; Mr. Roger Robinson of Robinson Associates; and Dr. Judy Shelton, research fellow at the Hoover Institution.

We welcome each witness here and ask each of them to use 8 minutes and no more to summarize his or her views. We can then proceed to the questions with the idea of being able to stay within schedule. It also looks as if we will have a roll call vote on the Senate floor which will interrupt the proceedings.

I guess we will start——

Senator PRESSLER. Mr. Chairman, may I just say that I commend the chairman for holding these hearings. What is going on in the Soviet Union is just amazing to me, and I look forward to hearing the witnesses and to reading their testimony.

I have two other committees meeting at this hour, so if I come and go a bit it is no disrespect to the witnesses.

I think whether it is the sale of grain to the Soviet Union or military treaties or whatever area, we are dealing with something totally new, and I think it is very appropriate that we do this broad review.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Senator Pressler.

Shall we start out with Dr. Hewett. I guess that is alphabetical order, which is as good as anything.

STATEMENT OF ED A. HEWETT, SENIOR FELLOW, THE BROOKING INSTITUTION

Dr. HEWETT. Mr. Chairman, I have submitted a statement for the record that is primarily concerned with how our policies should change toward the U.S.S.R. But since in this first panel you would rather have a general discussion of Soviet economy let me offer a few remarks on that to supplement the written testimony that I have given you.

In answer to the question that I and other Soviet specialists frequently receive, whether or not Gorbachev is succeeding or failing, I say that the question is not up to this complicated process. There have already been successes, and there have been failures. Most important, Soviet leaders seem to be learning from their mistakes.

I like to think of the process of reform in the Soviet Union on three levels: first of all, the conceptual level. Second, the level of actions. Third, the level of results.

At the conceptual level there are extraordinary developments in the Soviet Union. Today I dare say if any of you just went through a week's worth of translations of Soviet press, you would probably be shocked at what is being discussed. It is now commonplace to pick up an article and halfway through sit back and wonder if this is not Milton Friedman that is writing about the Soviet economy. Indeed, I meet more Friedmanites now than I do advocates of central planning in the Soviet Union, and I am sometimes perceived as the conservative because I am worried they have gone too far.

They are debating now about everything in their system, in essence rethinking the very foundations of socialism. Some of the most respected establishment figures will say publicly, when you ask them what would you like the Soviet Union to look like 20 years from now or 30 years from now, that they favor the Swedish model. Not Hungary, and not China, but Sweden.

If you take a particular area where the debate is fascinating, they are now debating about property: who should have the right to own property in the Soviet Union, who should have the right to use it. Basically, the debate is about how to create the right conditions to allow privatization in the Soviet Union.

One of the most respected economists who seems to have the ear of Gorbachev, Leonid Abalkin, has started a debate on property. He had an article recently about the socialist enterprise, in which he asked: "When is an enterprise socialist?" His answer was that an enterprise is socialist when it is making money. When it is not making money, it is not socialist." Now, that is a slightly different definition of "socialism" than I was raised on or, for that matter,

he was raised on, since he taught in the Academy of Social Sciences in the party and taught about ideology.

There is also now in the Soviet Union a growing recognition, that the reform will not move ahead unless they create real conditions for competition, very severe competition in which firms are competing with each other for customers and, for that matter, competing with foreign firms for customers.

This has led to a revolution in their thinking about the rest of the world and a willingness, in some cases an enthusiasm to talk about an opening to the West. The opening comes not only at the commercial level but also in the level of ideas. I and many others find ourselves frequently being quizzed by Soviets on how they might do what they want to do. I can tell you personally it is much easier to tell them they are doing things wrong than it is to try to tell them how to do them right.

The second level to think about the reform is what they have actually done, the measures that have been introduced in the Soviet Union. Here, it is a much more mixed picture. In many ways the reform that has actually come out—forget the speeches, forget the documents, look at what has actually come out—has been full of contradictions.

Gorbachev is a man who says he wants to give enterprises much more autonomy than they have had in the past, but he is also the man who created a whole new administrative level of superministerial bodies including, for example, the State Agri-Industrial Commission which he has finally had to abolish at the all-union level. He also retained the 50-odd ministries or most of them and told them it was their job to supervise enterprises.

So, he is sending a double message. He is telling ministers not to interfere in enterprises, but telling them also that those are their enterprises.

It is a reform which has given somewhat more autonomy to enterprises, but without changing prices. Enterprises in many cases face prices that are a quarter of a century old. They are the wrong prices. Enterprises that do have some room for maneuver go out and try to make money, giving bureaucrats an excuse to interfere because the wrong products are being produced.

It is a reform that has been half hearted because many Soviet leaders fear that if they decentralize—if they accept what some of their Friedmanite academics are telling them—that they will lose control of the system.

Indeed for me, one of the most striking things now in the Soviet Union is that the academic economists and the policymakers are almost at war with each other in their thinking about the system.

Because it has been an inconsistent reform, the third level of the reform—results—have been very disappointing. Economic performance from a quantitative point of view has been decent in the Soviet Union. If you believe official statistics, the GNP is growing about 5 percent per annum, which many countries wish they could achieve. But those statistics probably include a good deal of hidden inflation. In fact, national income is probably growing much more slowly.

More importantly, there has been no qualitative transformation, the type that Gorbachev hoped to see in the economy.

But most important of all is the political point that people expected much more out of this reform, and they are now disappointed. They feel that in Gorbachev's fifth year they should see some difference in their daily lives.

Put yourself in the place of a worker from Magnitagorsk, and ask what perestroika has meant to him. He is afraid he might lose his job. Even if he does not lose his job, he is afraid his income will fall. Even if his income does not fall, he is afraid that prices will go up. In the end, he is really not too concerned about prices because there is nothing much on the shelves anyway. That is perestroika for him. It is much better reading in the newspapers, much better television, but it does not do much for the average worker. In fact, the average worker was forgotten in this reform. From this point of view, the reform, if you look at it in terms of what has actually been done, is discouraging.

Many people have concluded that Gorbachev will not succeed. I am much more optimistic. I am optimistic, first of all, because of the debate I talked about in the Soviet Union. Compared to 4 years ago, this society better understands what needs to be done and also is beginning to get a notion of what they might do.

Second, every time Gorbachev has run up against a barrier, he has become more not less radical. I expect that as economic performance continues along its poor path, he will choose the more radical reform, and I therefore would expect it to emerge in the 1990's.

I certainly do not worry about his political position. I think this whole debate about whether or not Gorbachev will be around in a year has diverted us. It is an unnecessary diversion. As Jerry Hough can tell you in much more detail, this is a man who has consolidated his power at an extraordinary pace, and I think we ought to stop worrying about whether or not he is going to be around and start worrying about what he is going to be like 5 years from now when he still stands at the pinnacle of this system.

Let me conclude by just summarizing very briefly what I say in my statement about what our policy stands should be toward this.

I would like to see us approach policy toward the Soviet Union with a sense of proportion. There is very little we can do on the margin to affect this reform one way or the other. The fate of the reform will be decided in Moscow, not Washington or Bonn. It is not a matter of cosmic significance whether we subsidize U.S. farmers and ship them 1.5 million tons of grain. Frankly, much of our policy is not a matter of cosmic significance for the reform.

I would like to see us move to a neutral policy toward the Soviet Union in which we get out of the way, within the constraints of our vital national security concerns allowing economics to determine this relationship.

I think we can do that, and what we will discover is that the impediments to United States-Soviet trade are not most-favored-nation treatment, not the lack of credits, but the Soviet reform itself. Let us make it clear to Soviet leaders that it is their reform that will determine the level of East-West trade and not U.S. policy.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Hewett follows:]

PREPARED STATEMENT OF ED A. HEWETT

I.—When Mikhail Gorbachev assumed the post of General Secretary in March 1985, the United States posture toward economic relations with the U.S.S.R. was primarily one of denial: of credits; of most-favored-nation treatment; and of high or even middle-level technology.

The justifications for denial were many, ranging from general concerns that we not aid the U.S.S.R. in its massive military buildup to specific objections concerning human rights in the U.S.S.R. and the Soviet invasion of Afghanistan, to mention just two.

The denial policy remains in Gorbachev's fifth year, but its underpinnings are quickly crumbling: Soviet troops are out of Afghanistan; immigration figures are up; the first multicandidate elections in Soviet history were held in March; and freedoms of speech and religious belief—while restricted in the U.S.S.R.—are rapidly expanding.

It is time to change our policy on economic relations with the U.S.S.R., not only because the rest of the world is doing so, but most importantly because Soviet society is changing in a direction we have long hoped for. It has a long way to go before it is the pluralistic political and economic system we would like to see. But the direction of change is the right one, and the pace of change is impressive. We should welcome these developments and respond to them.

II.—We should approach this debate over policy toward United States-Soviet economic relations with a sense of proportion. The West's, and particularly the United States, influence over this process is limited. To the extent we can have an impact it should be designed to give maximal play to the economic forces which were so prominent in bringing Mikhail Gorbachev to power.

Perestroika is a home-grown product whose fate will be determined in Moscow, not Bonn or Washington. By their very existence Western economic and political systems have served as a powerful influence on the reform process in the U.S.S.R., and that will continue to be the case. Whatever conscious actions Western governments may take, individually or collectively, to direct the process from outside are inevitably operating on a very unpredictable, and small, margin.

Moreover, we in the United States must realize that our role in East-West trade and finance, while important, is on the whole rather modes. Firms from Europe, Japan, and Korea are actively seeking Soviet business, and between them they produce virtually the full range of products we in the United States can offer. And their governments are willing to offer official credits, or credit guarantees, to underwrite the sales. In that economic context, our policy of denial serves primarily to deny business to U.S. firms; it does little to deny the Soviets access to the credits or goods they wish to obtain.

The U.S. should move away from the denial policy, retaining only those elements clearly linked to vital national security interests. In other areas we should give full play to economic forces in trade and financial relations, avoiding any temptations to offer special subsidies to the USSR as a "reward" for perestroika. The U.S.S.R. is a military superpower whose own leaders chose to devote an excessive share of their national product over the years to military purposes. Now they have decided that it is in their own self-interest to shift the allocation of resources and reform the system. There is no need for the West to issue special prizes because Soviet leaders have come to their senses. It will be good enough if the U.S. leads other western countries in creating an environment in which the basic economics of East-West commercial relations will determine the nature of the relationship.

III.—As a practical matter this general approach would entail the following changes in U.S. policy: the President should use this powers under the Jackson-Vanik amendment to lift the restrictions on most-favored nation treatment and official credits; the Stevenson and Byrd amendments to the Ex-Im Bank Act and the 1974 Trade Act (respectively) could be retained as a useful way for Congress to track official credits to the U.S.S.R. and; we should agree to sit down with the U.S.S.R. to discuss their role in the world economy, including their desire to join GATT and (possibly) the IMF and IBRD.

Lifting the Jackson-Vanik restrictions would permit Ex-Im bank and other official U.S. Government bodies to resume lending up to the $300 million limit set by the Stevenson and Byrd amendments. As a matter of policy it might be useful to specify to Ex-Im that they devise a special program to promote lending and guarantees in particular on trade and other arrangements (including joint ventures) where the Soviet partner is a cooperative or joint venture. It is these new forms of ownership which are at the cutting edge of perestroika, and we should do whatever we can to encourage commercial contacts at that level.

We should also use Ex-Im credits, as well as discussions with the U.S.S.R. on possible membership in international economic organizations, to press for a much more transparent Soviet economy via a dramatic improvement in the quality and quantity of Soviet economic statistics. Bank lending to the U.S.S.R. should not be allowed to proceed apace without better official statistics on the strengths and weaknesses of the Soviet international economic position, and of the economy itself. Moreover, the publication of more complete data on the economy will almost certainly act as a catalyst to accelerate the reform as the full cost of Soviet defense, as well as the full nature of Soviet economic problems, becomes public knowledge and therefore the subject of public debate.

Finally, we should make it clear to western businesses and banks that, aside from specific national security concerns, their decisions on economic relations with Soviet enterprises should be guided by economic considerations. The U.S. Government should not promote trade with the U.S.S.R. It should get out of the way and allow economic considerations to do what they do rather well.

IV.—This approach, should we adopt it, will most likely not result in a burst in new trade agreements between Soviet and American firms. The most formidable barriers to East-West trade are in the Soviet economic system itself, and those have not changed dramatically in the last four years. Those will only change if and when the U.S.S.R. goes through the radical economic reform now much talked about, but little implemented.

But the U.S. Government should, by dismantling its web of legislation denying trade and credits to the U.S.S.R., get out of the way so that the true impediments to expanded Soviet economic relations with the West will be clear. In so doing we will be sending a powerful message to Soviet leaders that we shall place no artificial impediments in the way of their effort to become a major player in the world economy. But neither will we offer special subsidies to ease the way. It depends on them now, and in particular on their reform. That particular message delivered firmly, but in the most civil way, may in some small fashion act to help the reform process along.

The CHAIRMAN. Thank you very much, Dr. Hewett.

Dr. Hough.

STATEMENT OF DR. JERRY HOUGH, DIRECTOR, CENTER ON EAST-WEST TRADE, INVESTMENT, AND COMMUNICATIONS, DUKE UNIVERSITY, DURHAM, NC

Dr. HOUGH. I would like to talk about Soviet foreign economic policy and its implications.

It seems to me if you listen to the various specialists, we all agree essentially on three things. First, we agree that ideological change has been very radical indeed. The essence of the Communist model was Ortarki from world market forces, and integration into the world economy is now proclaimed as party policy.

Foreign capitalists, most of them the once hated multinational corporations, can now have joint ownership of Soviet property, and Soviet workers will work under them.

Gorbachev has announced an export strategy that will force Soviet workers to compete with foreign workers who are supposedly being exploited. Whatever the practical scale of these activities, the reversal of so many central ideological tenants is really quite striking.

The second thing we agree on is that not much of economic significance has actually occurred thus far, and this is true in the foreign economic realm as well as the domestic. There are some 400 joint ventures, but they do not add up to much. The trade statistics show little evidence that any export strategy has been adopted, and significant Soviet multinational corporations are developments still of the future.

Third, we can all agree that we are in a period of radicalization of the legislation on foreign economic relations. The rules on joint

ventures have been eased. The number of enterprises with the right to export goods has been enormously expanded. Foreign economic zones are being set up. A foreign currency auction is being established.

On these questions, it seems to me, there probably is not much a great deal of disagreement among us. The disagreements among the specialists first center on the question is the poor record of the last 4 years a reflection of systemic problems that will also determine the future course of events; that is, will the new legislation not do much more than the last legislation, or does the new legislation coupled with some acceleration of domestic economic reform signify that we are about to enter a takeoff stage in foreign economic relations in which the statistics on foreign trade will begin rising in an accelerated upward curve.

On this question, my judgment is that we are indeed in the first part of a takeoff stage. I think many in the Soviet Union and the West have not appreciated the sheer technical difficulty of reform and have not seen the first year or two of new legislation as a necessary period of experimentation.

It seems to me that the pressures for an opening to the world economy are absolutely compelling. The Soviet economy has had a level of protectionism that makes Japan look like an open economy, and the Soviet Union has no hope of catching up with South Korea or even staying ahead of China unless it subjects its manufacturers to foreign competition.

I continue to believe that the Russians are deeply patriotic, even nationalistic people and that the party is absolutely determined to begin rebuilding Soviet power. It seems to me that our ideology is right, that there is no way for them to have good economic progress unless they actually begin attacking the protectionism head on.

Now that Gorbachev has completed his final consolidation of power and can force through whatever policies he wants, it seems to me that he is in a position where he is either going to get full credit or full blame for whatever happens in the economy forthwith, and I am convinced he will move to ensure that it will not be blamed.

There is another difference, it seems to me, among the specialists and particularly among specialists such political scientists such as myself and many of the economists. That is the question of the question that we ask. Essentially, they ask the economist question will policy affect economic performance significantly in the next year or so. They generally answer this question quite skeptically, and I have no problem with this answer.

It seems to me that successful economic reform, successful perestroika is something like Italy has undergone in the last 40 years; that is, maybe 30 or 40 years from now they will be at world level, but it is a slow process.

I am a political scientist, not an economist, and my interest is the foreign policy interest, not simply what is the percentage of GNP going to be next year. It seems to me that this is a crucial distinction to keep in mind.

If Gorbachev is determined to integrate the Soviet Union into the world economy and if he has the political power to take deci-

sions in this realm, then we are going to see the foreign policy implications long before his economic policies have a perceptible impact on economic performance.

I think it would be the gravest mistake for policymakers to listen to cautionary statements about the economic side of domestic or foreign economic policy and to conclude that we can therefore be complacent about the speed of developments in Soviet foreign policy.

Soviet foreign policy has already changed far more than economic performance, and I think it is on the verge of becoming much more vigorous as he begins trying to get his economic performance going.

It seems to me that there are three foreign policy implications of Soviet foreign economic policy that are likely to be most significant to the United States. First, the Jackson-Vanik amendment used to have a largely symbolic meaning because the level of tariffs is unimportant for a country that is not exporting manufactured goods. They have not. They have simply been exporting oil, diamond, gold, and things like that.

A country that adopts an export strategy, however, when the quality of its goods is low must follow the example of the Pacific countries. It can export goods when the quality is low, but it must do it by pricing them very low, as the South Koreans, Taiwan, and so forth do.

But if a country is doing what the Soviets must do, which is export low quality goods at low prices, then tariffs become extremely important to it. The Soviet Union has made major concessions on immigration, and it is surely going to react if there is not a waiver on Jackson-Vanik fairly quickly.

The second implication of Soviet foreign economic policy is that Soviet relations with Japan are beginning to improve, and this is likely to accelerate. The Soviet Union has always feared that the return of Four Islands would result in no economic benefits, and for this reason movement on the Four Islands issue was unlikely until foreign economic policy had reached a stage where Japanese investment and access to the Japanese market could really be utilized.

With economic reform now reaching the point where Japanese capital is important, with the Japanese now having an attractive formula on the return to the islands, that is saying that it can be done over a 4-year period, that the negotiations will take 4 years, it seems to me that what is going to happen very quickly after Gorbachev's visit to China is over is the turn of Soviet attention on the Far East quickly to Japan.

It strikes me that we are going to have real problems there because what is going to happen is that essentially the Soviet demands will involve restraints on the American Navy probably, which means it will be us rather than the Soviets who stand between the Japanese and their islands.

Third, the Soviet Union clearly needs a continuation in the improvement of its relations with Europe. In part, this is needed in order to cut the size of its military expenditures; but in large part it also needs to end the perception of a Soviet threat in Europe so

that Europeans will not be afraid of long-term investment in the Soviet Union.

It remains unclear how far and how fast this process will go; however, the great danger for Gorbachev's European policy is a revolt in East Germany that would have to be suppressed.

In addition, if NATO stonewalls on conventional arms reduction, the only real option is a separate agreement between the two Germanies. It is possible that Gorbachev will begin moving on these issues far more rapidly than most think possible. The widespread belief that the Soviet Union would not consider a reunification of Germany is very doubtful, although of course the total process of reunification will probably take 10, 15, 20 years.

In conclusion, there seems to be a widespread feeling in Washington that we can have with Gorbachev the kind of unchallenging detente we could have had with Brezhnev in 1972 but without the competition in the Third World. This is a fundamental misreading of the situation. Brezhnev wanted only the importation of technology, not full integration of the world economy. Hence, his foreign policy in the industrial world could focus on the maintenance of stability, on the preservation of the fruits of World War II.

Gorbachev's talk about a common European home and his absolute commitment to integration in the world economy means that Gorbachev must risk the stability of the postwar settlement with Germany and Japan, all the more so because the United States is forcing it to do so with its own foreign economic policy and its policy on conventional arms control.

Thank you.

[The prepared statement of Dr. Hough was not available at the time or printing.]

The CHAIRMAN. Thank you very much indeed, Dr. Hough. Your full statements will be inserted in the record, naturally. I just want everybody to be assured of that.

Mr. Robinson.

STATEMENT OF ROGER W. ROBINSON, JR., FORMER SENIOR DIRECTOR FOR INTERNATIONAL ECONOMIC AFFAIRS, NATIONAL SECURITY COUNCIL, WASHINGTON, DC

Mr. ROBINSON. Mr. Chairman, I am grateful for the invitation by you and the ranking Republican to appear before the Senate Foreign Relations Committee on the subject of United States-Soviet relations.

Prior to establishing a Washington-based consulting firm, I was senior director for International Economic Affairs at the National Security Council from 1982 to 1985 and, before that, a vice president in the International Department of the Chase Manhattan Bank in New York where I had responsibilities for Chase's loan portfolio in the Soviet Union, Eastern Europe, and Yugoslavia for a 5-year period.

Kremlin leaders today often comment on the importance of bolstering trade and financial ties with the West. The traditional Soviet slogan of peaceful coexistence with adversaries has given way to the goals of economic interdependence and global problem-solving.

On the surface, this potentially represents the greatest shift in Soviet foreign policy since the end of World War II, one that some believe may presage the end of the Cold War largely through greater economic and financial integration between East and West.

Gorbachev has launched his ambitious list of international economic initiatives in tandem with an activist Soviet agenda on arms control and regional disputes. The NATO alliance, already in significant disarray, is undergoing a profound period of soul searching on how to respond. President Bush is under growing pressure somehow to compete with Mr. Gorbachev and come up with his own groundbreaking initiatives.

While the Bush administration has yet to announce the result of its national security reviews, there has been considerable speculation in the press that the major new idea will be a substantial liberalization of United States trade and financial policy toward the East bloc beginning with Poland and Hungary and extending to the U.S.S.R. and Bulgaria—East Germany, Rumania, and Czechoslovakia appear not to qualify for the new United States policy approach at this time.

If these reports are correct, the administration may be embarking on a course which could cause incalculable harm to U.S. national security and alliance relations and whose potential commercial benefits would likely be modest at best.

In the interest of summarizing my testimony I wish to turn attention to Poland, which represents a particularly complex opportunity for Western policymakers. The alliance is inclined to respond positively to the encouraging roundtable accords in Poland.

After many years of stalemate, General Jaruzelski has finally agreed to give the democratic opposition a meaningful role in Polish politics. However, he is now seeking Western financial support for an undefined set of economic half steps that will probably fail under present circumstances.

This is a precarious moment for the Bush administration, as miscalculation on the proper elements and structure of a rescue package for Poland will likely have severe long-term consequences for the Polish people and East-West relations in general.

If the Polish economy does not begin to show results soon, the streets will again be filled with protesters, and the government will probably feel compelled to crack down yet again to preserve its authority. Should this happen, Western interest in Poland would likely dwindle, and Poland's economy could remain in a condition of stagnation into the next century.

It is neither in the interest of the West nor the Soviet Union to see this happen. Stability in central Europe is of great importance to both sides. There would be no winners should Poland erupt into new turmoil. For this reason it is only sensible that the Soviet Union share the burden of any Western rescue package for Poland with substantial hard currency credits and trade relief which should exceed or at least match those resources offered by the West.

By doing so, the Soviets would, for the first time, demonstrate their tangible support for Polish reforms and for the efforts of the IMF and the World Bank. Barring major Soviet financial contributions, Poland will probably fall far short of the estimated $25 bil-

lion in hard currency credits and debt relief required over the next several years to restart its economy.

Specifically, the U.S.S.R. should be persuaded by alliance members to:

Sign a new treaty with Warsaw pledging that under no circumstances will Soviet troops intervene in Poland, thus assuring Western companies and banks of a secure and predictable investment climate;

Provide $5 to $10 billion in immediate hard currency loans and guaranteed credit lines which would enable Poland to finance new industrial imports and help service its external debt;

Establish a multibillion dollar collateralized account funded, by pledged oil and gold generated hard currency earnings, to cover a substantial portion of new Western credit exposure in the event of future Polish arrearages;

Permit Poland to cut its defense budget by at least 50 percent; and

Undertake several other measures referenced in my testimony.

The Soviets certainly have the creditworthiness, excess borrowing capacity and reserves sufficient to set up a sizable collateralized hard currency account. Soviet credit guarantees, which, in effect, would allow Moscow to borrow on Poland's behalf in international financial markets, can easily be established if Gorbachev's "new thinking" prevails.

The Soviets can obtain additional resources for Poland by trimming back their expensive foreign aid programs to Communist countries in the Third World and by using some of the savings from anticipated defense cutbacks.

An added benefit of insisting on this Soviet burdensharing policy in Poland and Hungary is that it might make Moscow more flexible in arms control negotiations and regional disputes in view of Soviet budget constraints.

Hopefully the alliance will recognize the unpredictability of what Deputy National Security Advisor Robert Gates terms "the cycles of Kremlin reform" which have periodically unfolded over the past 70 years, particularly the disappointing and even dangerous outcomes for the West. Secretary of Defense Cheney should be commended for his candor and realism in recently responding to a central question which is surely on the minds of most high-level Western policymakers; namely, will Gorbachev's perestroika succeed in modernizing the Soviet command economy?

Secretary Cheney's pessimistic prediction is at least as likely to be realized as those by observers who say that Gorbachev's perestroika is not a "temporary aberration" but an enduring fundamental reordering of traditional Soviet priorities. Even if Gorbachev were to score successes with perestroika, the West confronts a second equally important uncertainty—whether this will result in a more inwardlooking and peaceful Soviet Union or an economically stronger and more dynamic adversary.

Given the major security implications of these questions, to which no one has an answer and probably will not for some years to come, it would be shortsighted for the administration, the Congress, the UK, France, Japan, and other interested parties to

engage in a "riverboat gamble" concerning the direction of perestroika.

Specifically, this means resisting the apparent Moscow-Bonn agenda of relaxed controls on militarily useful Western technology, continued and even expanded undisciplined taxpayer-guaranteed Soviet bloc borrowing, and the breaching of allied energy security agreements which limit Soviet natural gas deliveries to Western Europe to a prudent level.

Concerning Eastern Europe, the methodology for advancing the encouraging political and economic developments in Poland and Hungary needs to be reevaluated and coordinated at the highest levels of the alliance.

I have outlined the direction such a coordinated alliance strategy could take in a Wall Street Journal article of April 21 which is being submitted for the record with your permission.

It is important that the Congress focus on the issue of major Soviet trade and financial burdensharing in Poland as a means of limiting the open-ended administration commitment of new United States taxpayer credit exposure to Warsaw and freeing up finite resources of the IMF, the World Bank, and the Paris Club for the pressing requirements of numerous developing countries.

Finally, the appropriate forums for meaningful alliance consultations on these issues as well as long overdue discussions and policy agreements on the security dimensions of Western financial flows to Warsaw Pact borrowers and Soviet client states are the NATO summit at the end of this month and the Paris economic summit on July 14 to 16. If these crucial East-West economic and financial security issues are to receive the agenda prominence which they require, alliance working groups need to be established immediately at the ministerial level.

With the committee's permission I would like to submit for the record of these hearings along with my complete testimony, as I said, a recent article I wrote in the Wall Street Journal on United States policy toward Poland and a paper of the Center for Security Policy also pertaining to the Polish economic situation and Western policy considerations.

Mr. ROBINSON. Thank you, Mr. Chairman.

[The article referred to and the prepared statement of Mr. Robinson follow:]

[The Wall Street Journal, Apr. 21, 1989]

POLISH "RESCUE" WILL ONLY EGG ON THE SQUANDERERS

(By Roger W. Robinson, Jr.)

The package of initiatives just announced by President Bush—representing potentially more than $1 billion in economic and financial benefits for Poland from the U.S. and multilateral organizations—is seriously flawed.

As the West is asked once again to assume substantial financial exposure to assist one of the more debt-ridden regimes of Eastern Europe, it should keep in mind past experience: Far from resolving the systemic shortcomings of Poland's command economy, undisciplined Western largess has permitted them to persist and worsen. The Polish economy is in crisis notwithstanding some $40 billion in gross indebtedness, most of it in the form of loans for general, unverifiable purposes. Virtually every Western commercial bank has written off its Polish debt—a strong message from the marketplace.

The Bush plan assigns important roles to the International Monetary Fund and the World Bank, whose failure records with command economies have been well-documented on these pages. And it comes only a few years after Americans were obliged to pay out more than $1 billion to cover de facto Polish default to the U.S. Export-Import Bank, the Commodity Credit Corporation, and other U.S. government-backed programs. Thus far, the Bush package constitutes an open-ended commitment that over the next 5 to 10 years could amount to several billion dollars in new taxpayer liabilities and probably losses.

This commitment is all the more striking in that, as it now stands, the administration is making no demands that the Soviet Union provide its own hard-currency credits, loan guarantees and related "burden-sharing" measures to accompany Western economic and financial assistance to Poland. Regrettably, by such an omission the U.S. is greatly facilitating the Soviets' intention to "internationalize perestroika," which would allow them to offload the financial obligations of their impoverished allies and client-states from Soviet books to Western balance sheets. In view of the Soviet Union's enormous responsibility for Poland's present economic crisis, Moscow's "free ride" on salvaging the Polish economy is all the more ironic.

Finally, the West's initiatives aimed at assisting Polish perestroika coincide with the emergence of severe economic and political dislocation in Mexico, Venezuela, the Philippines and many other developing countries—all of which desperately need to make progress in implementing serious debt reduction and creating "new money" programs. Increasingly, the ability of Warsaw Pact borrowers to secure preferential treatment from Western creditors—such as better credit terms and access to fresh credit flows—is constricting resources available to Latin American and other democracies. It is time for Congress to scrutinize U.S. priorities in this regard, particularly identifying where U.S. exports and employment have the greatest stake.

Since the Bush administration's plan for economic and financial assistance to Poland may have unintended and undesirable repercussions both for the Poles and for the American taxpayer, a different package of initiatives is urgently needed. Key features of such an alternative plan would involve:

● Withholding release of IMF funds pending a demonstration by the Polish leadership over the next six months of its willingness to implement structural reforms (e.g., massive privatization of the Polish economy; the reallocation of priority resources to the destitute civilian economy and away from the military sector and unproductive economic cooperation projects with the East Bloc; radical reductions in Poland's wasteful bureaucracy; implementation of comprehensive measures designed to address Poland's chronic environmental contamination).

If and when the Polish authorities demonstrate the political will to implement such a program, the West should agree publicly on specific goals and milestones upon which all disbursements of funds, from bilateral and multilateral sources, will be made contingent. Even then, all Western financial assistance measures intended to stimulate Polish reforms must be fully reversible in the event of subsequent political crackdowns, financial default, or other missed milestones.

● A firm OECD agreement is required at the outset of these new initiatives to insulate Western taxpayers to the maximum extent possible from the consequences of potential default or successive debt reschedulings on the part of the Polish Government and associated enterprises. A financial rescue package for Poland should not transfer credit risks to Western governments and taxpayers as a way of covering and thereby encouraging loans from the commercial banks. In this connection, Poland's practice of paying some interest on commercial bank credits while withholding such payments to government creditors must cease.

● The Western allies should secure Soviet agreement to provide significant trade relief and hard currency credits that would enable Poland to finance new industrial imports and service its external debt. Moscow should also be persuaded to set aside a multibillion dollar collateralized account (e.g., funded by pledged oil and gold-generated earnings) to cover at least a portion of Western credit exposure in the event of Polish arrearages. In this way, finite IMF/World Bank resources could be husbanded to meet the enormous claims of the developing world.

● East bloc countries should obtain no more favorable terms on or access to Western financial flows or debt reschedulings than those offered fledgling democracies in the developing world.

The strong possibility that the Jaruzelski regime will balk at effecting the required structural changes in the economy makes such an alternative and disciplined assistance program the responsible course of action. Doing otherwise could be tantamount to playing the patsy if the Polish government is simply cynically trying to spread the blame—by expanding political participation to Solidarity and the other organizations—when still more economic hardship and attendant popular resent-

ment is in the offing. The predictable backlash might actually help Gen. Wojiech Jaruzelski discredit the independent trade union movement while at the same time reinvigorating the now-Communist Party.

At a minimum, the agreement reached with Solidarity ensures another six years of rule under General Jaruzelski. Unless real restructuring is made an explicit condition of Western aid, it is only reasonable to expect that systemic contributors to Poland's economic stagnation (such as the vast number of state-owned and controlled enterprises and the thousands of unproductive manufacturing agreements between Polish and other East Bloc enterprises) will continue to absorb—and squander—new Western funds.

PREPARED STATEMENT OF ROGER W. ROBINSON, JR.

Mr. Chairman, I am grateful for the opportunity to appear before the Senate Foreign Relations Committee on the subject of U.S.-Soviet relations. As you are aware, East-West economic and financial relations are the object of considerable attention these days at the highest levels of the Soviet as well as Alliance governments. Accordingly, this series of hearings held by the committee are especially timely and important in eliciting different perspectives on what is occurring within the USSR and how the U.S. should best respond.

Kremlin leaders today often comment on the importance of bolstering trade and financial ties with the West. The traditional Soviet slogan of "peaceful coexistence" with adversaries has given way to the goals of "economic interdependence" and "global problem solving." On the surface, this potentially represents the greatest shift in Soviet foreign policy since the end of World War II -- one that some believe may presage the end of the Cold War largely through greater East-West economic and financial "integration."

Gorbachev has launched his ambitious list of international economic initiatives in tandem with an activist Soviet agenda on arms control and regional disputes. The NATO Alliance, already in significant disarray, is undergoing a profound period of soul-searching on how to respond. President Bush is under growing pressure to somehow compete with Mr. Gorbachev and come up with his own ground-breaking initiatives.

While the Bush Administration has yet to announce the results of its national security reviews, there has been considerable speculation in the press that the major "new idea" will be a substantial liberalization of U.S. trade and financial policy towards the East Bloc, beginning with Poland and Hungary and extending to the USSR and Bulgaria. (East Germany, Romania and Czechoslovakia appear not to qualify for the new U.S. policy approach at this time.) If these reports are correct, the Administration may be embarking on a course which could cause incalculable harm to US national security and Alliance relations, and whose potential commercial benefits would likely be modest at best.

Gorbachev's Economic Proposals: Old Soviet Wine in New Bottles

At the outset, it is important to establish that the Soviet strategy of creating East-West economic interdependence as a basis for ending the Cold War is not new. Throughout the late 1960's and 1970's Premier Alexi Kosygin, Vladimir Alkhimov (then Chairman of the Soviet Bank For Foreign Trade and later the State Bank) and other Soviet officials vigorously courted Western nations in search of large syndicated credits, joint ventures and other long term trade, technical and financial agreements. Not surprisingly, many of Moscow's recent trade and financial overtures toward the West are lifted directly from the Kosygin playbook.

During the 1970's the U.S. Congress remained skeptical about the wisdom of accepting the Soviet offers. Dissatisfied with Soviet human rights performance and concerned over Moscow's military build-up and expanding adventurism in the Third World, the Congress passed a series of measures that moderated the growth of economic and financial relations with the USSR until these sources of bilateral tension could be substantially reduced or removed altogether.

Then as now, the Soviets enjoyed their greatest success in gaining converts in the Federal Republic of Germany, particularly Chancellor Willy Brandt and the left-wing members of the Social Democratic Party. The FRG, unlike the U.S., is not burdened with the responsibility of containing Soviet global aggression outside NATO and also tends to focus its human rights concerns more narrowly. Further, Chancellors Brandt, Schmidt and now Kohl all appear to view East-West economic and financial relations as the linchpin of Germany's Ostpolitik policy which centers on the convergence of German and Soviet goals in Eastern Europe.

It is therefore not unusual that the FRG, of all West European countries, responded most eagerly to Soviet economic initiatives, as demonstrated by Bonn's enthusiastic support for construction of the huge Siberian gas pipeline project during the martial law crackdown in Poland. The series of FRG export control violations in chemical weapons, nuclear materials, and ballistic missile technology sales to Libya, Iran, Iraq, Pakistan, India, and Argentina which are currently embarrassing Bonn, are also symptomatic of how independently the FRG perceives its national interests. Increasingly, these interests fundamentally differ with those of the United States and other NATO members.

The FRG also has the dubious distinction of being the largest source of diverted militarily-relevant Western technology to Warsaw Pact countries. In retrospect, this record of FRG carelessness toward national security export controls was one of the principal reasons why the Reagan Administration feared Soviet domination of West German natural gas markets that would have created substantial new FRG vulnerabilities to Soviet political and economic leverage.

The rise in influence of the Green environmentalist party and nationalist Republicans may further advance prospects for Ostpolitik and East-West economic interdependence on Soviet terms. The emergence of a tacit "Red-Green-Brown" anti-NATO coalition, which could dominate West Germany's defense and foreign policy decision-making, is now a real possibility. Neutralist and anti-nuclear sentiments are clearly on the rise among broad segments of the West German population -- ironically intensified by the recent INF agreement.

Against this backdrop, FRG Foreign Minister Hans-Dietrich Genscher is urging the Bush Administration to follow the FRG lead on East-West economic and financial policies. President Bush is also being advised by some in the Administration to basically go along with Bonn in the interest of "helping" Chancellor Kohl revive his sagging domestic political fortunes.

As Chancellor Kohl goes about coopting the neutralist agenda of his opponents, it would be unwise for the US to insert itself into fluid FRG domestic politics by taking actions contrary to US long-term security interests. It is equally unwise to try to play to domestic political developments inside the Soviet Union by trying to "help" Gorbachev. As Deputy National Security Adviser, Robert Gates correctly states in a recent article in Washington Post:

> "Gorbachev is challenging some aspects of this [Soviet] system, but even he acknowledges he has not yet significantly changed it. We cannot ignore the cyclical turn to reform, detente, and foreign assistance each time the system has faced catastrophe. For 70 years we have watched the Soviets proclaim reform and turn to the West for help, while at the end of the day the essential features of their system remain unchanged."

In this connection, the FRG has a regrettable tendency to pocket U.S. concessions in East-West relations, then to ignore the agreement involved and insist on further concessions. The most vivid recent example is the compromise agreement reached at a meeting of NATO Defense Ministers in Brussels on April 20. The agreement specified that the U.S. would back away from insisting on an immediate decision by Bonn to modernize the aging Lance short-range nuclear missiles in exchange for the FRG dropping its request for speedy negotiations with Moscow on short-range nuclear weapons and nuclear artillery. Approximately one day after completion of this NATO agreement, Chancellor Kohl, spurred on by Foreign Minister Genscher, publicly demanded early short-range nuclear missile negotiations with Moscow and dispatched Mr. Genscher and Defense Minister Stoltenberg to Washington to press for U.S. acceptance of the "new" German position. Unfortunately, this is precisely the kind of scenario that is likely to unfold should the U.S. go down the slippery slope of de facto support or silence concerning the FRG's current economic and financial agenda toward the Soviet Union, Eastern Europe and Soviet client states -- crafted by Mr. Genscher.

A "Marshall Plan" for Eastern Europe

Ostpolitik has clearly produced significant gains for the FRG. Through generous credit flows, Bonn has been able to repatriate tens of thousands of ethnic Germans from Soviet Bloc countries. The Bonn government has also been able to obtain a significant relaxation of restrictions on cross border visits to East Germany and to secure the release of numerous East German political prisoners. In recognition of West Germany's forward leaning posture on arms control, Bonn is -- as in the past -- being singled out for special attention by Moscow, which adds to the FRG's already substantial influence within NATO and the EC. Finally, many West German firms find markets in the East Bloc for exports that are not competitive in the West -- making expanded East-West trade a kind of government-sponsored employment program.

It is therefore tempting to conclude that what has worked so well for the FRG can also work for other NATO members, including the United States. Under FRG prodding, the Alliance has inadvertently created what amounts to a kind of "Marshall Plan" for the East Bloc which is the envy of many developing countries, given the lack of economic conditionality associated with new credits.

The elements include:

- Large-scale Western government support for East-West trade through multi-billion dollar subsidy programs, loan and credit line guarantees, and long-term bilateral agreements which amount to "managed trade" (especially prevalent in East-West agricultural trade);

- tolerance of large gaps in required data disclosure by Soviet Bloc borrowers and in Western reporting of financial transactions (eg. the continued secrecy of inter-German financial flows, the omission of the indebtedness of Soviet-owned banks located in the West in calculations of overall Soviet indebtedness etc.);

- ad hoc emergency credit support so that formal debt reschedulings and the discipline of IMF/Paris Club economic programs can be avoided (eg. Hungary in 1987-88);

- o tolerance of substantial arrearages to Western creditors, ostensibly to assist the borrower's self-initiated "reforms";

- o significant debt relief for Soviet Bloc borrowers once a rescheduling is no longer avoidable, particularly in foregoing interest payments due to Western governments and taxpayers while commercial banks continue to receive substantial interest payments (e.g. in Poland);

- o Undue policy flexibility on the part of the IMF and the World Bank so that funds are, at times, released in the absence of fundamental economic reforms;

- o easy access to billions of dollars of Western untied credits (ie. no questions asked about where the money is going or how it is being used) which has constituted the majority of new credits to Soviet Bloc borrowers in the 1980's; and

- o proposed eligibility for trade assistance programs originally intended for the developing countries such as investment guarantees and lower tariffs under the Generalized System of Preferences (GSP).

Western subsidies for East-West trade became so excessive by the early 1980's that a public clamor arose for their removal. (Many Western trade unions were concerned that the subsidies were financing the transfer of industries and jobs to communist countries, where the labor force was under tight government control and wages could be held down). As part of the allied sanctions in response to Soviet-sponsored repression in Poland in 1981-82, the OECD began the process of raising the USSR to Category I (developed country) status, which forced the Soviets to pay market rates on government-backed credits. Despite this progress, Bulgaria, Poland, Romania and Cuba still qualify for potentially generous subsidies under OECD guidelines.

One of the cumulative effects of this Western government support over the years was to boost significantly the credit ratings of many Soviet Bloc nations, even in the wake of the region's deteriorating economic condition in the 1980's. Members of Congress became alarmed at the ready availability of undisciplined Western credits at low interest rates to Soviet Bloc borrowers as well as to Cuba, Nicaragua, Libya and Vietnam. The U.S. Senate in 1988 passed two strong resolutions calling on the Reagan Administration to engage in immediate high-level consultations with the allies on the national security dimensions of Western credit flows. Notwithstanding Secretary of State Baker's assertions that such policy discussions took place at the Toronto Economic Summit in June 1988, no meaningful Alliance consultations have yet occurred.

The Treasury Department did prepare a study on East-West credit flows in November 1988 which, although inattentive to national security concerns, highlights the preferential treatment received by Soviet Bloc borrowers. According to the study:

- o Rates charged to Soviet Bloc borrowers have often been lower than rates charged developing countries or even OECD borrowers (OECD data show an average margin of 24 basis points -- one quarter of one percent -- over the London Interbank offered Rate for syndicated credits to the Soviet Bloc in 1987, compared to 69 basis points for developing countires and 34 basis points for the OECD area).

- Average spreads on bank loans to the Soviet Bloc have declined rapidly in recent years despite the USSR's own hard currency crunch and the debt crisis in Eastern Europe (the average spread on loans to the East Bloc dropped from 118 basis points in 1983 to 24 basis points in 1987).

- By way of comparison, although most Latin American sovereign borrowers have been forced out of the voluntary syndicated loan market, largely noncreditworthy countries like Hungary and Bulgaria can still obtain loans with relative ease, due to Western government support.

- Whereas most credits provided to developing countries are tightly tied to specific purposes or conditions, credits provided the USSR have been largely untied, meaning that the loan proceeds can be more flexibly diverted by Moscow to finance activities harmful to U.S. national security interests. (Between 1983 and 1987, untied credits averaged about 80% of the total volume of Western lending to the USSR.)

Unfortunately the lack of meaningful Alliance-wide consultations on East-West financial relations has left the Bush Administration at a serious disadvantage in responding effectively to FRG and Soviet initiatives as well as meeting the challenges of developments in Poland and Hungary.

National Security and East-West Finance

There is no longer any doubt that, with the exceptions of Czechoslovakia and the German Democratic Republic, the entire Soviet empire is caught in the throes of an economic and financial crisis. The reaction of East European governments has been to assemble an eclectic mix of economic and political reforms. Not having experienced free markets or capitalism in decades, it is likely that most of these Stalinist command economies will continue to find systemic reforms beyond their reach.

The Soviet Union's imposition of its failed centrally-controlled economic system on the countries of Eastern Europe is the single most important cause of the regions economic and financial woes. It is ironic, however, that the West's own undisciplined largess bares a substantial share of the blame for the debt overhang which inhibits economic recovery in Poland and Hungary. As I have described, for more than twenty years Western banks and governments have treated Soviet Bloc borrowers with relative leniency. Regrettably, the wreckage of past economic reform programs in Yugoslavia, Poland, Hungary, Romania and Cuba represents a sad tribute to the misguided idealism of past Western financial and trade policies.

Concern over continued undisciplined Western credit flows to Soviet Bloc countries has prompted Senators like Bill Bradley, James Sasser, Dennis DeConcini, Malcolm Wallop, Connie Mack, Jesse Helms and others to ask the Administration not to finance perestroika unconditionally. I share their concern, particularly when evaluating the issue of how the Alliance can best assist the people of Eastern Europe in a manner consistent with our national security and human rights objectives. There appears to be an emerging consensus in the U.S. that continuing the West's unconditional, untied lending policies will merely reduce the pressure on the Soviets for fundamental reforms and allow them to avoid or defer tough resource allocation decisions, including reductions in Soviet defense spending and global adventurism.

Poland presents a particularly complex opportunity for Western policymakers. The Alliance is inclined to respond positively to the encouraging Roundtable Accords in Poland. After many years of stalemate, General Jaruzelski has finally agreed to give the democratic opposition a meaningful role in Polish politics. However, he is now seeking Western financial support for an undefined set of economic half-steps that will probably fail under present circumstances.

This is a precarious moment for the Bush Administration, as miscalculation on the proper elements and structure of a rescue package for Poland will likely have severe long-term consequences for the Polish people and for East-West relations in general. If the Polish economy does not begin to show results soon, the streets will again be filled with protesters and the government will probably feel compelled to crack down, yet again, to preserve its authority. Should this happen, Western interest in Poland would likely dwindle, and Poland's economy could remain in a condition of stagnation into the next century.

Soviet "Burden-Sharing" in Poland

It is neither in the interest of the West nor the Soviet Union to see this happen. Stability in Central Europe is of great importance to both sides. There would be no winners should Poland erupt into renewed turmoil. For this reason it is only sensible that the Soviet Union share the burden of any Western rescue package for Poland with substantial hard currency credits and trade relief which should exceed, or at least match, those resources offered by the West. By doing so, the Soviets would, for the first time, demonstrate their tangible support for Polish reforms and for the efforts of the IMF and the World Bank. Barring major Soviet financial contributions, Poland will probably fall far short of the estimated $25 billion in hard currency credits and debt relief required over the next several years to restart its economy.

Specifically, the USSR should be persuaded by Alliance members to:

- sign a new treaty with Warsaw pledging that under no circumstances will Soviet troops intervene in Poland, thus assuring Western companies and banks of a secure and predictable investment climate.

- provide $5-10 billion dollars in immediate hard currency loans and guaranteed credit lines which would enable Poland to finance new industrial imports and help service its external debt.

- establish a multibillion dollar collateralized account (eg. funded by pledged oil and gold-generated hard currency earnings) to cover a substantial portion of new Western credit exposure in the event of future Polish arrearages;

- announce publicly its support for free market reforms and large-scale privatization of key industries under IMF/World Bank auspices;

- urge Poland to dismantle its bloated government bureaucracy which still administers thousands of enterprises and basic industries;

- permit Poland to cut by at least fifty percent its defense budget (estimated at $14 billion in 1986) and

free up Polish industries and infrastructure which today are dedicated to producing components for Soviet weapons systems;

- o offer Poland substantial trade relief by reducing the prices charged Poland for Soviet oil and stepping up the volume of oil deliveries;

- o allow Poland to sell in Western markets many of the high quality manufactured goods now being shipped to Soviet enterprises;

- o request Poland's trading partners in Eastern Europe to run multi-year trade deficits with Warsaw as a way of contributing to Polish economic recovery, particularly the GDR, Czechoslovakia, and Bulgaria; and

- o allow the Polish government to gradually withdraw from the Council for Mutual Economic Assistance, and resist the claims on Polish resources for wasteful joint CMEA projects, particularly in the energy cooperation and high technology areas.

The Soviets certainly have the creditworthiness, excess borrowing capacity, and reserves sufficient to set up a sizeable collateralized hard currency account. Soviet credit guarantees which, in effect, would allow Moscow to borrow on Poland's behalf in international financial markets, can easily be established if Gorbachev's "new thinking" prevails. The Soviets can obtain additional resources for Poland by trimming back their expensive foreign aid programs to communist countries in the Third World, and by using some of the savings from anticipated defense cutbacks. An added benefit of insisting on this Soviet "burden-sharing" policy in Poland and Hungary is that it might make Moscow more flexible in arms control negotiations and regional disputes in view of Soviet budget constraints.

Conclusion

Hopefully, the Alliance will recognize the unpredictability of what Robert Gates terms "the cycles of Kremlin reform" which have periodically unfolded over the past seventy years--particularly the disappointing, and even dangerous outcomes for the West. Secretary of Defense Cheney should be commended for his candor and realism in recently responding to a central question which is surely on the minds of most high-level Western policy-makers -- namely will Gorbachev's perestroika succeed in modernizing the Soviet command economy.[1]

Secretary Cheney's pessimistic prediction is at least as likely to be realized as those by observers who say that Gorbachev's perestroika is not a "temporary aberration" but an enduring, fundamental reordering of traditional Soviet priorities. Even if Gorbachev were to score successes with

---

[1]Secretary Cheney stated, "If I had to guess today, I would guess he [Gorbachev] would ultimately fail. That is to say that he will not be able to reform the Soviet economy to turn it into an efficient modern society." Cheney went on to say "And when that happens, he's likely to be replaced by someone who will be far more hostile than he has been in terms of his attitude towards the West." Cable News Network, Evans and Novak Report, April 29, 1989.

perestroika, the West confronts a second equally important uncertainty -- whether this will result in a more inward-looking and peaceful Soviet Union, or an economically stronger and more dynamic adversary.

Given the major security implications of these questions-- to which no one has an answer and probably will not for some years to come -- it would be short-sighted for the Administration, the Congress, the UK, France, Japan and other interested parties to engage in a "riverboat gamble" concerning the direction of perestroika. Specifically, this means resisting the apparent Moscow-Bonn agenda of relaxed controls on militarily-useful Western technology, continued and even expanded undisciplined, taxpayer guaranteed Soviet Bloc borrowing, and the breaching of allied energy security agreements which limit Soviet natural gas deliveries to Western Europe to a prudent level.

There is also an urgent need, in the interests of Alliance unity, to establish a new consensus on the financial relations of NATO coutries with the USSR and its allies. Fortunately, Japan -- even prior to its present domestic political upheaval -- has quietly adopted a considerably more cautious approach to its credit flows to Soviet Bloc countries (with the exception of an inordinate share of untied lending to Hungary) than has its West European partners. If continued, this development should be viewed by the Congress as a major Japanese contribution to Alliance defense burden-sharing.

Concerning Eastern Europe, the methodology for advancing the encouraging political and economic developments in Poland and Hungary needs to be reevaluated and coordinated at the highest levels of the Alliance. I have outlined the direction such a coordinated Alliance strategy could take in a Wall Street Journal article (4/21/89), which is being submitted, along with a more comprehensive paper of the Washington-based Center for Security Policy, for the record of these hearings. It is important that the Congress focus on the issue of major Soviet trade and financial burden-sharing in Poland as a means of limiting the open-ended Administration commitment of new U.S. taxpayer credit exposure to Warsaw, and freeing up finite resources of the IMF, the World Bank, and the Paris Club for the pressing requirements of numerous developing countries.

Finally, the appropriate fora for meaningful Alliance consultations on these issues -- as well as long-overdue discussions and policy agreements on the security dimensions of Western financial flows to Warsaw Pact borrowers and Soviet client states -- are the NATO Summit at the end of this month and the Paris Economic Summit on July 14. If these crucial East-West economic and financial security issues are to receive the agenda prominence which they require, Alliance working groups need to be established immediately at the Ministerial level.

The CHAIRMAN. Thank you very much indeed.

Next is Dr. Shelton of the Hoover Institution of Stanford University.

STATEMENT OF DR. JUDY SHELTON, RESEARCH FELLOW, HOOVER INSTITUTION, STANFORD UNIVERSITY, PALO ALTO, CA

Dr. SHELTON. Mr. Chairman, Senator Robb, Senator Simon, I am pleased to appear before you today to offer my views on economic and financial issues involving the Soviet Union. My name is Judy Shelton, and I am a research fellow at the Hoover Institution at Stanford University.

Earlier this year I had a book published on Soviet borrowing called "The Coming Soviet Crash: Gorbachev's Desperate Pursuit of Credit in Western Financial Markets." That title no doubt conveys my own rather negative assessment of General Secretary Gorbachev's chances for success in reforming the Soviet economic system.

Unlike some observers in the West who are impressed by what they perceive as a breathtaking array of bold new initiatives being offered by Gorbachev and who would call on President Bush to raise the political ante with his own set of dramatic gestures toward Moscow, I am convinced that the Soviet leadership is operating from a position of economic weakness and financial desperation. Indeed, I detect a certain amount of flailing.

Some of the most fundamental domestic reforms originally put forward by Gorbachev and hailed in the West as progress toward capitalism and free markets have already been retracted or severely compromised. Price reform, the very linchpin of Soviet economic restructuring, has been put off indefinitely for fear that its implementation would incite explosive social protest among a population accustomed to fixed prices and government subsidies.

The fledgling private cooperative movement was dealt a harsh blow this past December when the Soviet Council of Ministers, instead of acting to broaden the scope of approved private services, issued a set of decrees restricting co-ops from various activities including publishing scholarly or artistic material, reducing or distributing films or videos, manufacturing religious objects or selling jewelry containing precious metals.

These vacillations and false starts suggest an endemic resistance within the Soviet Union to the basic principles of commerce which characterize free market economies. It should give pause to those who would seek to go into partnership financially or politically with the Soviets.

Western support for perestroika may well turn out to be its kiss of death, ironically. During last week's Communist Party central committee session one party chief made the statement: "When people see in our press that leaders of bourgeois parties are praising our reforms, then they must remember the words of Vladimir Lenin: 'Be worried when your class enemy praises you.' "

The true test of Soviet willingness to tolerate economic liberty and the political freedom that nurtures it will likely take place later this month when the Supreme Soviet of Estonia is expected to adopt a program of self-government aimed at achieving economic and legal autonomy from the Soviet Union by January 1, 1991. The

Estonians are seeking the right to legalize private enterprise, return all land from state and collective farms to farmers, and conduct business with foreign countries. There are mooted demands for a separate currency as well.

How the Kremlin responds to this challenge to its authority should provide the West with key indications of the relative importance Moscow places on maintaining political control versus improving the economic prospects of the people. Will Estonians be encouraged in their efforts to raise productivity, or will they be penalized for pulling too hard against the reins of central planning?

The larger issues for the West will continue to focus on our evolving relationship with the Soviet Union on military, political, and economic terms, but it is crucial that we not overlook certain recent developments that are purely financial in nature. One of the most disturbing involves Soviet use of Western credits and demonstrates yet another reversal of stated Soviet intentions under perestroika.

In light of pronouncements that the Soviet budget deficit now exceeds 100 billion rubles, representing some 11 percent of Soviet gross national product, Soviet economists have entered into a critical debate over how best to utilize access to Western credits. Some argue that credits should only be used to import capital equipment that will produce future revenues, while others urge that the credits be used to bring in Western consumer goods.

Gorbachev's principal economic adviser, Abel Aganbegyan, advocates the fiscally responsible approach, saying: "We have no intention of borrowing on credit to cover our budget deficit, even though many Western bankers are offering us much credit."

Aware that taking on financial commitments for the future and using them to pay for consumption today is the path to debt disaster, Aganbegyan insists, "Credit should only be taken out for activities that generate funds, and the budget deficit generates no money to repay with."

Aganbegyan sums up his philosophy on borrowing with an old Eastern adage: "When you enter a house, look to see how to get out of it." He vows that the Kremlin holds this same attitude about credits.

But other Soviet academicians are allowing the desperate need for more consumer goods to overrule their better judgment. One such economist, A. Orlov, calculates that the Soviet Union now ranks between 45th and 50th in the world in terms of a basket of available products. He advocates increased Western credit to buy consumer goods.

Joining him is prominent Soviet economist Nikolai Shmelyov, who recommends that the Soviet Government double its net foreign debt to finance a wave of Western imports.

Ignoring the warnings of Aganbegyan, perestroika's primary architect, it now appears Moscow is succumbing to the temporary fix of buying consumer goods on credit. According to an article in the Financial Times 3 weeks ago, the Soviet Government has set up an emergency fund of $8 billion in foreign currencies for imports of Western consumer goods to ease acute shortages. This extra allocation is on top of $51 billion already set aside under the state plan for consumer imports from all foreign countries during 1989.

The new allocation will be spent strictly on consumer goods, including 15 million pairs of shoes, 12 million pairs of women's boots, 15 million dresses, 30 million pairs of panty hose, 10 million cassette tapes, 180,000 tons of soap, and 10,000 tons of toothpaste.

Obviously, the compelling issue here is not technology transfer. But financial risk, with its potential for equally damaging results, should be a serious concern. What happens down the road when Soviet bills must be paid? Surely we do not want to go through a replay of the Third World debt crisis, this time with a country that has nuclear weapons trained on us.

Over and above the financial uncertainties introduced by the turnaround in Soviet policy on Western purchases, there is the more profound question of whether or not it is in the interest of the West, not to mention struggling Soviet republics such as Estonia, to ease the internal economic pressure that is the driving force behind perestroika. Why should we act to diminish the powerful impetus that now compels the Kremlin to make the wrenching change away from its traditional emphasis on guns in favor of butter?

Outside economic assistance would seem to forestall the very transition process that we yearn to see taking place in the Soviet Union.

Then there is the sobering question, what happens if Gorbachev fails and is replaced? Are all bets off between the West and the Soviet Union?

To the extent that Western credits are proffered as a tool of foreign policy, commercial banks can be expected to turn toward Western governments to bail them out should the Soviets default. And if government guarantees are made available to cover Soviet loans—proponents of the Jackson-Vanik waiver should take note—taxpayers would feel the hit even more directly. Asking United States citizens to be cosigners on loans to the Soviet Union at a time when our own budget deficit is wreaking financial havoc would be nothing short of a travesty.

In conclusion, the policy of moving slowly on Soviet initiatives may not capture headlines, but it is clearly a prudent response during this period of political and economic upheaval in the Soviet Union. the Bush administration should be encouraged to resist the siren call that says do something, anything, to steal Gorbachev's seeming global thunder. We have, after all, a useful old adage of our own: "Fools rush in where angels fear to tread." While members of the White House policy review team may not necessarily qualify as angels, they surely exhibit wisdom in not rushing to Moscow's financial aid.

Thank you.

[The prepared statements of Dr. Shelton and Mr. Parker follow:]

PREPARED STATEMENT OF JUDY SHELTON

Mr. Chairman and members of the Senate Foreign Relations Committee:

I am pleased to appear before you today to offer my views on economic and financial issues involving the Soviet Union. My name is Judy Shelton and I am a research fellow at the Hoover Institution at Stanford University.

Earlier this year I had a book published on Soviet borrowing called The Coming Soviet Crash: Gorbachev's Desperate Pursuit of Credit in Western Financial Markets. That title, no doubt, conveys my own rather negative assessment of General Secretary Gorbachev's chances for success in reforming the Soviet economic system.

Unlike some observers in the West who are impressed by what they perceive as a breathtaking array of bold new initiatives being offered by Gorbachev, and who would call on President Bush to raise the political ante with his own set of dramatic gestures toward Moscow, I am convinced that the Soviet leadership is operating from a position of economic weakness and financial desperation. Indeed, I detect a certain amount of flailing.

Some of the most fundamental domestic reforms originally put forward by Gorbachev---hailed in the West as progress toward capitalism and free markets---have already been retracted or severely compromised. Price reform, the very linchpin of Soviet economic restructuring, has been put off indefinitely for fear that its implementation would incite explosive social protest among a population accustomed to fixed prices and government

subsidies. The fledgling private cooperative movement was dealt a harsh blow this past December when the Soviet Council of Ministers, instead of acting to broaden the scope of approved private services, issued a set of decrees restricting co-ops from various activities including publishing scholarly or artistic material, producing or distributing films or videos, manufacturing religious objects, or selling jewelry containing precious metals.

These vacillations and false starts suggest an endemic resistance within the Soviet Union to the basic principles of commerce which characterize free market economies. It should give pause to those who would seek to go into partnership, financially or politically, with the Soviets. Western support for perestroika may well turn out to be its kiss of death, ironically. During last week's Communist Party Central Committee session, one party chief made the statement: "When people see in our press that leaders of bourgeois parties are praising our reforms, then they must remember the words of Vladimir Lenin: 'Be worried when your class enemy praises you.'"

The true test of Soviet willingness to tolerate economic liberty and the political freedom that nurtures it will likely take place later this month when the Supreme Soviet of Estonia is expected to adopt a program for self-government aimed at achieving economic and legal autonomy from the Soviet Union by January 1, 1991. The Estonians are seeking the right to legalize private enterprise, return all land from state and collective farms to farmers, and conduct business with foreign countries. There are mooted demands for a separate currency as well.

How the Kremlin responds to this challenge to its authority should provide the West with key indications of the relative

importance Moscow places on maintaining political control versus improving the economic prospects of the people. Will Estonians be encouraged in their efforts to raise productivity, or will they be penalized for pulling too hard against the reins of central planning?

The larger issues for the West will continue to focus on our evolving relationship with the Soviet Union in military, political and economic terms. But it is crucial that we not overlook certain recent developments that are purely financial in nature. One of the most disturbing involves Soviet use of Western credits and demonstrates yet another reversal of stated Soviet intentions under perestroika.

In light of pronouncements that the Soviet budget deficit now exceeds 100 billion rubles, representing some 11 percent of Soviet gross national product, Soviet economists have entered into a critical debate over how best to utilize access to Western credits. Some argue that credits should only be used to import capital equipment that will produce future revenues, while others urge that the credits be used to bring in Western consumer goods.

Gorbachev's principal economic adviser, Abel Aganbegyan, advocates the fiscally responsible approach, saying, "We have no intention of borrowing on credit to cover our budget deficit, even though many Western bankers are offering us much credit." Aware that taking on financial commitments for the future and using them to pay for consumption today is the path to debt disaster, Aganbegyan insists, "Credit should only be taken out for activities that generate funds, and the budget deficit doesn't generate any money to repay with."

Aganbegyan sums up his philosophy on borrowing with an old Eastern adage: "When you enter a house, look to see how to get

out of it." He vows that the Kremlin holds this same attitude about credits.

But other Soviet academicians are allowing the desperate need for more consumer goods to overrule their better judgment. One such economist, A. Orlov, calculates that the Soviet Union now ranks between 45th and 50th in the world in terms of a "basket" of available products; he advocates increased Western credits to buy consumer goods. Joining him is prominent Soviet economist Nikolai Shmelyov who recommends that the Soviet government double its net foreign debt to finance a wave of Western imports.

Ignoring the warnings of Aganbegyan, perestroika's primary architect, it now appears Moscow is succumbing to the temporary fix of buying consumer goods on credit. According to an article in the Financial Times three weeks ago, the Soviet government has set up an emergency fund of $8 billion in foreign currencies for imports of Western consumer goods to ease acute shortages. This extra allocation is on top of $51 billion already set aside under the state plan for consumer imports from all foreign countries during 1989.

The new allocation will be spent strictly on consumer goods including: 15 million pairs of shoes, 12 million pairs of women's boots, 15 million dresses, 30 million pair of pantyhose, 10 million cassette tapes, 180,000 tons of soap and 10,000 tons of toothpaste.

Obviously, the compelling issue here is not technology transfer. But financial risk, with its potential for equally damaging results, should be a serious concern. What happens down the road when Soviet bills must be paid? Surely we do not want to go through a replay of the Third World debt crisis, this time with a country that has nuclear weapons trained on us.

Over and above the financial uncertainties introduced by the turnaround in Soviet policy on Western purchases, there is the more profound question of whether or not it is in the interests of the West---not to mention struggling Soviet republics such as Estonia---to ease the internal economic pressure that is the driving force behind perestroika. Why should we act to diminish the powerful impetus that now compels the Kremlin to make the wrenching change away from its traditional emphasis on guns in favor of butter? Outside economic assistance would seem to forestall the very transition process that we yearn to see taking place in the Soviet Union.

Then there is the sobering question: What happens if Gorbachev fails and is replaced? Are all bets off between the West and the Soviet Union? To the extent that Western credits are proffered as a tool of foreign policy, commercial banks can be expected to turn toward Western governments to bail them out should the Soviets default. And if government guarantees are made available to cover Soviet loans---proponents of a Jackson-Vanik waiver should take note---taxpayers would feel the hit even more directly. Asking U.S. citizens to be co-signers on loans to the Soviet Union at a time when our own budget deficit is wreaking financial havoc would be nothing short of a travesty.

In conclusion, the policy of moving slowly on Soviet initiatives may not capture headlines, but it is clearly a prudent response during this period of political and economic upheaval in the Soviet Union. The Bush administration should be encouraged to resist the siren call that says do something, anything, to steal Gorbachev's seeming global thunder.

We have, after all, a useful old adage of our own: "Fools rush in where angels fear to tread." While members of the White House policy review team may not necessarily qualify as angels, they surely exhibit wisdom in not rushing to Moscow's financial aid.

PREPARED STATEMENT OF RICHARD PARKER

The subject of the Soviet Union is a vast and complex one, and never more so than at present, as the United States addresses the question of change and Mikhail Gorbachev. For nearly half a century now, Americans have viewed the Soviet Union as the world's preponderant threat to a stable, democratic and expanding world. But given changes inside the Soviet Union since the accession of this latest General Secretary, that historic perception is being challenged.

The internal changes that culminated recently in nationwide elections for a new People's Congress are a good example: throughout the country, though the Communist Party maintained an overwhelming majority, individual candidates were rejected with an unprecedented frequency while vocal critics were elected. Weeks later, reflecting the elections results in part, 110 members of The Communist Party's Central Committee, many holdovers from the Brezhnev era, resigned.

These images of increasing democratic freedoms in the Soviet Union are judged to be at the heart of glasnost, the process of growing political liberties. By contrast, perestroika--the underlying restructuring of the Soviet economy--is in general viewed in the West as an outright failure, with dangerous implications.

Most American assessments use the words "stagnant," "decaying," or "failed" to describe the achievements of Gorbachev's economic reforms to date. Long consumer lines and vocal discontent, grain harvest shortfalls, and apparent

resistance and confusion about implementation of reforms are all repeatedly cited to buttress this argument about perestroika's weakness.

Coupled with ethnic discontent, and frequently-noted conservative resistance in the party hierarchy as well as in such dangerously nationalist and anti-Semitic organizations as Pamyat, many American observers have been led to the conclusion that Gorbachev's power may be in (to some, immediate) jeopardy, and that consequently any U.S. response to Soviet overtures on trade, arms negotiations, or other matters ought therefore to be highly cautious and conditional. National Security Advisor Scowcroft has bluntly warned that "the Cold War is not over," and former Secretary of State Kissinger has called on the United States to pursue a policy that, rather than responding to the Soviet Union directly, focuses on a renegotiation of Eastern European freedoms in exchange for a loosely-defined "guarantee" to the Soviets of their military/security interests in the area. Secretary of Defense Cheney, citing perceived Soviet economic failure, publicly anticipates Gorbachev's downfall and replacement by hard-liners.

Reading the Soviet economy properly, then, is vital to U.S. interests. But are we in fact assessing perestroika clearly? Are members of this committee--and Members of Congress in general--receiving the kinds of information needed to provide the most prudent judgments possible to defend U.S. interests in a rapidly-changing world?

Last October, shortly before the American presidential elections, I was sitting in the U.S. Embassy in Moscow, talking with senior diplomats there. In a not-for-attribution burst of candor, one of them admitted that he personally didn't care who won America's Presidential election, as long as the next occupant of the White House had a formulated and coherent policy toward

the Soviet Union. "Until we get one," he said, "they're going to keep beating us to death over here."

The official's directness surprised me, but it was followed by others in the room who murmured and nodded agreement. On return to the U.S., I shared this discussion with several Senators--and with it the results of six weeks I spent in the Soviet Union as a guest of the Soviet Academy of Sciences and the Institute of the U.S.A. and Canada, accompanied by a Harvard-trained Soviet specialist. The purpose of my visit was to assess perestroika--its progress to date and prospects for the future. I had wide-ranging discussions with more than two dozen senior Gorbachev advisors, planners, and economic specialists, including Abel Aganbegyan, head of the Economics Department of the Academy of Sciences, Leonid Abalkin, director of the Academy's Institute of Economics, Oleg Bogomolov, director of the Institute of Economics of the World Socialist System, and Vladimir Kostakov, head of the research department of Gosplan (the State Planning Committee), as well as Soviet administrators, journalists such as Vitaly Korotich and Vladimir Posner, and others. I also met with Western diplomats and journalists resident in Moscow and spoke informally with Soviet citizens from a broad cross section of society.

Based on these exchanges, my own observations, and subsequent discussions with Western Soviet-watchers since returning, I have reached conclusions that differ rather markedly from those currently popular in the West (or, more precisely, in the United States). While I went there keenly aware of the immense problems facing the Soviets, my research indicated that Gorbachev's economic reforms are in fact making significant and measurable progress. In particular, I was surprised to find evidence of a standard of living among Soviet citizens that is higher (although still frustratingly low, given rising expectations) than is generally believed in the West.

I came back from that trip with a much stronger sense of why so veteran a Soviet-Watcher as Sen. Proxmire had, six years ago, worried about distorting evidence about the Soviets, a tendency he had heard all too often while chairing Senate hearings on the Soviet future.

> There has been a tendency for some [U.S.] Government spokesmen to describe the Soviet economy as one in crisis, a basket case in danger of collapse. My view is that this exaggerates the seriousness of Soviet economic problems, which are serious enough without exaggeration. I do not think it serves a useful purpose to magnify their economic difficulties out of proportion, and I think it is counterproductive to deceive ourselves about the strength as well as the weakness of the Soviet economy. (1)

I did not conclude that perestroika is therefore a "success" or that severe setbacks may not be waiting in the wings. But I returned with a profound sense of the complexity of the reform process and the long tradition of Soviet reform upon which Gorbachev is seeking to build. It also became clear to me that perestroika is not a monolithic or one-dimensional process but an evolving, multi-stage effort. This year marks the end of what Gorbachev has called the "pre-reform" stage of reform; as the Soviets prepare to open up debate over the 13th five-year plan, they are about to enter the second and--in Gorbachev's mind--most crucial stage of the reform process.

Observers of the Soviet Union would do well to heed Sen. Proxmire's warning. For example, in a recent CIA/DIA report on the Soviet economy's 1988 performance, the analysts made much of the disappointing grain harvest which did much to slow the economy's overall performance--without underlining the fact that 1988 was globally the warmest year in a century, and that while Soviet harvests fell to 196 million tons, the U.S. harvest was itself reduced to 195 million tons. Similarly, treating Soviet cuts in investment for heavy industry and defense as signs of decay, the same analysis fails to underscore widely-discussed Soviet policy debates which had for years called for shifting emphasis to consumer goods and light industry in a society which already produces twice as much steel as the United States.

This does not mean the Soviets are, by any means, achieving the heady goals implicit in the first days of perestroika reforms--but to judge such massive and far-reaching reforms as the Soviets are attempting as a failure after only three years flies in the face of history. What conservative American commentator saw the Reagan agenda as failed by late 1983, with the U.S. in the midst of its worst recession in 50 years? And who, given the recent election of President Bush, would call the unprecedented deficits of his predecessor a road to political suicide?

In short, what may be necessary for American observers of perestroika is a shrewder--and more patient--assessment of perestroika's path. At this point, assuming that only adoption of Western-style markets and free competition will "solve" the Soviet's ongoing economic problems substitutes hope and prejudice for the possibility that the Soviets will forge some sort of mix of market and command incentives that meet the more relevant test of sustaining Russia's superpower status while enlarging its leadership base of given, rather than coerced, support among its own people.

It is that question--whether the Soviet leadership can create adequate, rather than ideal, market relations--that ought to be the test of contemporary judgement. What follows is a consideration of elements--historical, political, and economic--that are indigenous to the Soviet Union, not the United States, and which might serve the Senate in shaping its own response to the challenges Mr. Gorbachev has created.

Petestroika's Context

> The historic fate of the country, the position of socialism in the modern world in large part depends on how we proceed from here....We must achieve a significant acceleration in social and economic progress. There simply is no other path.
>
> Mikhail Gorbachev, April 23, 1985. (2)

It was a potent challenge by anyone's measure. Standing before his party's Central Committee for the first time as general secretary, Mikhail Gorbachev was a new and untested leader when he spoke these words. He had been in office barely a month--the fourth Soviet leader in as many years--and his listeners in the Soviet Union and the West could be pardoned if they heard echoes of the rhetoric of Old Russia in his grandiloquent challenge. Since the days of Peter the Great, leaders of this gigantic, yet so often somnolent, nation have sought to rouse their compatriots with similarly lofty purposes and sweeping visions.

Today, no one questions any longer the seriousness of the intent behind Gorbachev's challenge. Nor can anyone deny how swiftly and powerfully he has moved since then to put his program into place. Four years after that maiden speech, Gorbachev entered 1989 in a unique position of political strength, both at home and abroad. By checkmating his chief rival, Yegor Ligachev, in a Kremlin reshuffle the previous September, he had consolidated his supremacy in the all-important Central Committee (in the process becoming president in addition to general secretary). With a seemingly endless stream of glasnost reforms, he had opened Soviet society to an unprecedented degree. Meanwhile, his international initiatives--the withdrawal from Afghanistan, the signing of a Soviet-American agreement eliminating intermediate-range nuclear missiles, the December pledge at the United Nations to unilaterally reduce Soviet forces, and, most recently, the announcement of 14 percent cuts in the Soviet defense budget--had combined to convince a skeptical West that the Cold War might finally be ending.

But then there is the Soviet economy--and the attempt to reform it known as perestroika ("restructuring").

No Western assessment of perestroika begins without using adjectives such as "stagnant," "decaying," and "faltering" to

describe the Soviet economy's performance. Long lines, shoddy goods, poor harvests, and consumer grumbling are all standard images offered to Western readers and viewers. In the Soviet media, the reporting is no less harsh. Soviet citizens--if they need to be told--can learn regularly about shortages of meat, housing, and even laundry soap from the front pages of Izvestia or Pravda. If they prefer television, Vremya, the national evening news program, offers up images of grain rotting in the fields and goods sitting idle and unloaded at rail depots throughout the country. For the truly hard of heart, there is the late-night Spotlight on Perestroika, where the regular diet of perfidy, venality, and incompetence is guaranteed to outrage even the most recalcitrant of Stalinist holdovers.

Gorbachev himself has hardly shirked the task of highlighting his nation's ills. In September 1988, with national media covering his every move, he spent nearly a week in the Siberian city of Krasnoyarsk. There, like some latter-day socialist ward boss, he listened as citizens poured out a torrent of complaints about everything from rotten sausage to incompetent local party chiefs. More than listening, he prodded, cajoled, argued, exhorted--at one point, angrily responding to complaints about a particularly obnoxious official by asking, "So why don't you throw him out?" For the nation, it was electrifying--both as politics and as television drama.

In a year-end report on the economy several months later, Gorbachev detailed the country's shortcomings, acknowledging that the grain harvest had been the worst in three years, identifying a litany of consumer shortages, and citing a variety of shortfalls in industrial production. Although he assured his listeners that "we will stay on this course," he also admitted frankly that "the new processes are going very slowly."

In Western commentaries, Gorbachev's unrelenting candor has produced a double-edged response. On the one hand, it has been

greeted--along with the greater openness in Soviet society more generally--as a refreshing departure from a monotonous history of Soviet deception about the country's social and economic ills. The Soviet leader's call for markets, competition, and individual enterprise has likewise been welcomed, with some Western observers even regarding this as definitive proof that communism is "dead." At the same time, the new openness about Soviet economic and social problems has made many in the West aware of how much in fact hinges on the fate of perestroika. It has dawned on them that if Gorbachev fails, the future stability of the Soviet Union could be jeopardized, posing potentially enormous new risks for the West. More ominously, some skeptical Western analysts and policymakers have come to regard the failure of perestroika as a foregone conclusion--and have begun to use this to justify continued military vigilance and a less-than-wholehearted response to Gorbachev's outstretched hand.

The Cycle of Crisis and Reform -- and the Role of Fear and Pride

Although Senator Proxmire's cautionary words quoted above were spoken during the short-lived reign of Yuri Andropov and entered the Congressional Record without notice in the American press, the note they struck remains valid today. Yet the far more prevalent view, shared across a remarkably wide political spectrum in this country, is one that was recently expressed in a guest editorial in the Wall Street Journal. After a week-long visit to Moscow, the author found only failed effort and dour prospects: "A specter is haunting the communist world," he concluded, "the specter of economic failure. While supermarkets, shopping malls and personal computers describe the post-industrial West, the economies of the East are still struggling with the abacus and the cabbage, the slide rule and the smokestack. In a cruel paradox of history, the future has left the vanguard behind."(3)

For all its seductiveness, this image succumbs to precisely the sort of exaggeration Proxmire warned against; a more dispassionate assessment of the Soviet economy yields a rather different impression. If one compares GNP growth rates, for example (even using the cautious assessments of the CIA, rather than Soviet figures), one finds that the Soviet Union has consistently outperformed the West. Between the mid-1950s and the mid-1980s, Soviet GNP grew 4.5 times in size, compared to 2.5 times for the United States and 3.5 to 4.5 times for West European industrial powers. In aggregate production of primary industrial inputs--coal, steel, petroleum, cement, and so forth--the Soviet Union is the global leader.

Nor is the Soviet economy as hopelessly technologically backward as the "abacus and smokestack" imagery implies. Using their own technology, the Soviets have sent remote-operated machinery to the moon, drilled the deepest oil wells in the world, launched a titanium-hulled submarine that travels faster and deeper than any other, and sold advanced aluminum-casting technology and electronic circuits to U.S. defense contractors. Even in the rightfully much-maligned consumer goods sector, it is only fair to note that 95 percent of Soviet households now have television sets and refrigerators, while 80 percent own stereo systems.

None of these achievements, of course, can obscure the equally real difficulties the Soviet Union faces--as the Soviets themselves are the first to tell you these days. Despite the country's impressive overall GNP growth, Soviet leaders are deeply concerned by the fact that growth rates have been falling with each succeeding decade--from over 7 percent in the 1960s to under 2 percent by the early 1980s. The sense of decline created by this slowdown is at the heart of the Soviet impulse for reform, and helps to explain why Gorbachev's attempts have so far met with relatively little open opposition.(4)

Yet in their treatment of the Soviet economy, many Western analysts have tended to lose perspective, ignoring not only the considerable accomplishments but also the complex Soviet psychology of pride and fear that undergirds them. Pride in the country's accomplishments is especially strong among older Soviets, many of whom complain that glasnost and perestroika have produced an excessive focus on what the Soviet Union hasn't achieved, with too little on what it has. After all, they explain, Soviet living standards are now higher than at any point in history. Soviet industry built what was the second-largest economy in the world until the Japanese recently surged ahead with the rapid appreciation of the yen. Moreover, Soviet military power (equal or superior to America's, depending on whom one asks) has brought not only security, but the satisfaction of superpower status.

The flip side of this sense of achievement is a deeply rooted feeling of fear and insecurity, born of the terrible price the Soviet Union has paid to get where it is today. The depth of Soviet suffering is a familiar propaganda theme stressed endlessly by Soviet officials, but that doesn't make it any less true--or any less fervently believed even by ordinary Soviets. As the Western visitor is repeatedly reminded, the United States suffered fewer than 800,000 casualties--and was never invaded--during World War II. The Soviet Union, in contrast, lost 20 to 25 million people and saw 60 percent of its industrial base destroyed.

This peculiar mix of pride and insecurity is most evident today in the Soviets' fear that they will be "left behind" by the West, ultimately sinking into the status of a second-rate power. For example, when I asked Leonid Abalkin why--given all the weaknesses and "distortions" he had willingly catalogued in the Soviet economy--he would not recommend a "second-best" development strategy for the Soviet Union similar to that

followed by the Japanese in the 1950s and 1960s, he dismissed the thought with a backward wave of the hand. "That is unthinkable for a superpower, Mr. Parker," he replied, "unthinkable." Instead, he insisted, the Soviet Union would continue the crash course of modernization it had launched to become a "world-class" competitive economy, as proficient in the production of computers, robotics, and microchips as the West.

Gorbachev's efforts to rouse the country to this latest challenge have a distinctly familiar ring for Soviet citizens--especially for those of the older generation, who are quite accustomed to hearing such dramatic calls to action from their leaders. As head of state, Gorbachev inherits a well-defined tradition of identifying and responding to national crises; from earliest Bolshevik times, the Soviet leadership and population have been forced to operate under "crisis" conditions. Whether fighting the White armies and their Western allies during the Civil War, facing mass starvation and disease in the early 1920s, surviving Stalin's forced industrialization and kulak liquidation programs, or repelling the Nazi invasion, the Soviets have suffered a series of national traumas that is extraordinary even by the brutal standards of the 20th century.

Only with the end of World War II (and more fully with the death of Stalin in 1953) did Soviet domestic life begin to approximate what might be called "normalcy." Yet even then, the habits and language of crisis remained an important element of Soviet political discourse, quite apart from the genuine international challenges of the Cold War. Nikita Khrushchev justified his massive scheme of colonizing virgin lands in the Soviet East not only in terms of opportunity, but also as a response to a crisis--the by now all-too-familiar lack of adequate food supplies. Similarly, his sovnarkhoz reforms, which sought to reduce the centralized control of Moscow ministries over industry and give greater autonomy to regional authorities,

were presented as a response to the "crisis" (read underproduction) in state enterprises.

Even with the flamboyant Khrushchev gone, the pattern continued. The extensive "Kosygin reforms" of 1965 (many aspects of which anticipated perestroika 20 years later); the 1973 industrial reorganization, designed to increase industrial efficiency and weaken the administrative hierarchy; the 1979 reforms, including the introduction of net normative output standards designed to curtail waste in inputs of labor and materials--all these were part of the same endless cycle of domestic crisis and response. By the late 1970s, in fact, the cycle had acquired its own name--dalneishee sovershenstvovanie, the "further perfection" of the Soviet economy.

For many Western commentators, particularly those of the plus ca change school, the persistence of this cycle allowed them to dismiss Gorbachev early on as one more in an endless line of Soviet "fixers," each doomed to the same frustration and failure as his predecessor. But as Ed A. Hewett, an expert on the Soviet economy at the Brookings Institution, has pointed out, precedent is far from definitive in this case. "This is a society in which the party leader's enthusiasm for a particular measure or set of measures is a precondition, although not a guarantee, of success. Brezhnev brought no such enthusiasm to the task of economic reform. Gorbachev is the first general secretary since Khrushchev to enthusiastically support, conceive, and implement reforms in the economy." Hewett believes, as do I, that in addition to sharing Khrushchev's enthusiasm for reform, Gorbachev may well be astute enough to avoid the mistakes of his predecessor. "He is a skillful politician who understands the utility of symbols and the importance of competent cadres in leading positions. Thus even if his reforms resemble measures in the past, he may succeed where others have failed."(5)

Gorbachev's Contribution to the Cycle

Understanding the cycle of crisis and response--and Gorbachev's particular variation on the theme--is crucial to interpreting events in the Soviet Union. Gorbachev's first original contribution to the form came early in his tenure, when he declared that the country was in a "pre-crisis" situation and that his first years in office would be a period of "pre-reform." In defining the situation in this way, the Soviet leader lengthened the presumed cycle and established the need for a protracted reform process.

But by far his most important innovation has been his willingness to link political reform directly to economic reform. In previous attempts at "further perfection," Soviet leaders had concentrated their efforts on policy changes, rather than political solutions. By focusing on limited questions such as the role of ministries vis-a-vis industry, the interrelationships of the ministries, and the establishment of quotas, quality controls, and bonus schemes, they had avoided challenging the party structure or encouraging public participation in plan development. Not surprisingly, limited reform brought only limited results--when it had any effect at all.

Gorbachev's understanding of why previous reform cycles failed has figured centrally in the development of his own strategy. Far from being conceived as parallel or secondary to economic reforms, glasnost is the cornerstone of the first stage of reform or the "pre-reform" period; it is equal to, if not more important than, the blizzard of economic decrees that has come at the same time. Glasnost is, in fact, the logical result of Gorbachev's conviction that genuine reform is impossible without somehow motivating and engaging the Soviet population.

From the first, the general secretary was insistent in stressing the importance of the human factor (chelovecheskii faktor) in the revitalization of the Soviet economy. Early in

his tenure, however, Gorbachev confined this concern to policy formulations his predecessors--especially his mentor, Andropov--would have felt completely comfortable with. Defeatism, indifference, corruption, drunkenness, and general lack of discipline were the problems he was concerned about--not political democratization. As Abraham Becker has pointed out, "the term 'reform' was not common in the first months of the new regime. Change may have been deemed urgent, but it was characterized as 'perfecting the economic system.'" Becker goes on to observe, "The substantive part of the reform package was vague but quite familiar in its general form: strengthening both central planning and enterprise rights; eliminating 'superfluous' links in the administrative apparatus; enhancing economic incentives, etc."(6)

Not until the 27th Party Congress in February 1986, when Gorbachev first used the term "radical reform," did Soviet citizens realize just how extensive their new leader's cycle of crisis and response was going to be. By then, Gorbachev had already outlined a flurry of new programs, including the anti-alcohol campaign, the reform of housing construction, the restructuring of wages to favor more productive workers, the granting to individual enterprises of the right to engage in foreign trade, and increased emphasis on research and development and quality control. Yet these measures constituted a mere preview of what was to come.

In November 1986, the Law on Individual Labor gave citizens the right to engage in a wide range of previously illegal individual- and family-based economic activities, including most services and crafts. Three months later, the Law on Cooperatives for the first time permitted individuals to form cooperatives for various consumer and small manufacturing operations, from restaurants and auto repair to industrial-parts production. The Law on State Enterprises enacted in June 1987 crowned Gorbachev's

reform efforts by radically limiting the role of central ministries, extending the principle of self-financing and self-administration to all enterprises, and providing new incentive pay, greater worker self-management, and the threat of bankruptcy as stimuli to higher productivity.

Shortly thereafter, the Central Committee approved what in many ways remains the key document of the Gorbachev era to date--the Osnovye Polozhenia (Basic Theses For the Radical Restructuring of the Mangement of the Economy), which set forth in detail the Soviet leader's overarching vision of economic reform. This document contained all the key elements of perestroika: price reform, deregulation, enterprise autonomy, joint ventures, cooperative and individual enterprise, and the use of money as a true medium of exchange. Because of the complexity and broad scope of these reforms, their implementation was to be spread out over the remainder of the 12th five-year plan--that is, through January 1991. But their architect nonetheless made it clear that he expected the measures to have a rapid and far-reaching impact on the Soviet economy.

Gorbachev would later recall that by the time of the June 1987 party plenum, he had realized that "the processes of restructuring would not work unless they were implemented in coordination with all the other spheres of life of our society--above all the spiritual and political, the sphere of democracy, and many others." He had, he said, finally understood that "the most important thing, the main point of everything we are doing is to rouse people...to develop the process of democratization in order to involve people's energy and interest."(7)

In the West, attention since then has focused primarily on the democratization aspect of Gorbachev's program--to such an extent, in fact, that political reform has come to be viewed as something separate from economic reform. After an initial period of skepticism about the authenticity and depth of the political

changes, most analysts have now turned to the question of their durability. On the economic side, however, judgments have been uniformly more somber, and the question has typically been whether reform is having any effect at all.

But such a separation underestimates the true breadth of Gorbachev's vision of "radical reform." Without a successful political transformation, Gorbachev has clearly and repeatedly said, there can be no successful economic transformation. The Soviet economy is too large, too complex, and previous attempts to manage it from the center too discredited, for there to be any solution to the economic "crisis" other than a profound change that encompasses political and economic structures alike.

Perestroika: The First Stage

The March 1989 elections to the new Congress of People's Deputies can be viewed as the close of the first chapter of reform. The fundamental elements of glasnost and democratization are in place: a Soviet media operating with unprecedented freedom; at times, a wrenching reexamination of Soviet history; a new emphasis on religious freedom and human rights; publication of previously banned texts, from Animal Farm and Lolita to Darkness at Noon; implementation of contested elections; the systematic reform of the legal system. Likewise, many of the key elements of perestroika have been implemented: the crackdown (since partially relaxed) on alcohol; laws permitting cooperatives and joint ventures; cutbacks in the bureaucratic and party apparatus; elements of the new farm land-leasing program; initial phasing in of price reform at the wholesale level (although signs of retail price reform are less evident); first steps toward ruble convertibility; imposition of enterprise self-financing rules; greater investment in consumer-goods production; and even plans to cut military spending, which had not figured openly in earlier debates.

Yet after four years, the pertinent question is: how are Gorbachev's reforms working? The answer, not surprisingly, is that results have been mixed. Measured simply by the number and scope of changes actually implemented, perestroika is a success; no Soviet leader since Stalin can be said to have achieved so much in so little time. Moreover, the process of reform itself has moved along at a respectable pace, encountering less serious opposition than has generally been reported in the West. In many Western assessments of the Gorbachev regime, inordinate attention has been focused on the distribution of social forces arrayed in support of, and in opposition to, the new reform policies: "conservatives," it is said, are waging an all-out struggle against the Gorbachev "reformers." But after four years of perestroika, it is clear that fluidity, not fixed alliances, much more accurately characterizes the scene. Alliances shift with issues, and with the anticipated effect of new policies on different segments of society. Programs are put forward, encounter resistance, and are withdrawn--but then are put forward again, revised but usually only slightly less reformist in character.

In this highly fluid process, even individuals can move back and forth across the lines dividing "conservatives" and "reformers." Leonid Abalkin's career illustrates this perfectly. Appointed director of the Institute of Economics in 1986, he was already highly respected and well-connected in top party circles. In 1987, he was charged with supervising the drafting of the crucial Law on State Enterprise. When opposition produced the inevitable compromise (and open criticism even from reformist economists such as Aganbegyan) Abalkin, the consummate insider, nonetheless skillfully drove the legislation through. Yet a year later, at the June party conference, he stood before several thousand delegates and criticized the party's leadership for showing "lack of economic understanding" in its reform programs. Furious, Gorbachev rose to denounce Abalkin's "economic

determinism," yet weeks later would turn to him for advice on pricing. This ability to go "outside" while remaining "inside" (Abalkin is even now one of Gorbachev's most trusted counselors) is much more common than the static "left versus right" coverage in the Western media would indicate.

When one turns from process to results, however, the reform picture is considerably less rosy. In fact, measured against the 12th five-year plan (1986 to 1990), Gorbachev's reforms are not doing very well at all. At this point, there is virtually no chance that Soviet economic performance will reach the goals set by the plan. This is clearly a cause for concern among senior officials, since a failure to achieve the goals of the 12th plan will inevitably force a downward revision of the 13th plan, which Gorbachev has all along emphasized as marking the true measure of his program.

But before we automatically interpret this as a setback for Gorbachev, several cautions are immediately relevant. The current plan, although Gorbachev figured prominently in its creation, was nevertheless fundamentally an inheritance from his predecessor. Gorbachev took office nine months before it went into effect, and part of the debate leading up to the June 1987 party plenum was over whether the plan should be scrapped or drastically revised (the latter option prevailed). Hence a failure to meet the goals of this plan will not necessarily be seen as a failure of Gorbachev's program.

Moreover, Soviet five-year plan targets have historically never been met. The fulfillment of plan goals for two years in the late 1960s was the last, brief exception to this rule. Since then, faced with steadily falling growth rates, the plans have displayed what one Western observer has called "a persistent hope" that decline could be attenuated. Rather than using the five-year plans to set realistic economic targets, Soviet leaders have used them to exhort and motivate as part of the crisis-reform cycle--Gorbachev no less than his predecessors.

Consequently the annual plans, whose goals have consistently been set below the five-year plans, have tended to be more accurate in predicting Soviet economic behavior, especially aggregate growth (agriculture, so subject to weather, has remained stubbornly impervious to plan goals). One should not in any case focus too narrowly on plan goals when evaluating economic progress under perestroika; the monumental and unprecedented scope of the reforms must also be taken into account, since this in itself can entail difficulties for the economy. Soviet leaders have been, in essence, demanding a sudden upsurge in both the quantity and quality of goods from a society that had for some time shown little capacity for either; there were bound to be setbacks somewhere.

Gorbachev, in his role as ship's captain, steered clear of such admissions early on, although presumably his advisors were warning him that results were likely to be slow in coming. And in the early stages of reform, despite the inevitable confusion and dislocation, the Soviets did better than might have been expected. Consider, for example, the following data from a recently declassified 1988 CIA assessment.(8) In 1986, Gorbachev's first full year in office, the Soviet economy enjoyed "respectable growth" of nearly 4 percent, according to the agency. This was more than double the 1981-85 average, with industrial growth rates up nearly 50 percent and agriculture recording a blistering 8 percent annual growth rate, sustained by a record 210 million-ton grain harvest (the highest since 1978). Fixed-capital investment was up 8 percent, worker productivity was up 3.5 percent (compared to an average increase of 1.1 percent over the previous five years), and foreign trade surpluses doubled.

The next year, however, was considerably more sobering. Soviet agriculture was caught between the Scylla and Charybdis of a malign winter (followed by spring frosts) and the new demands created by reform. Agricultural production fell 3 percent, with

especially steep declines in fruit production (down 30 percent) and lesser but significant falls in output of potatoes, vegetables, and cotton. Remarkably, the grain harvest survived, even edging up a million tons. Moreover, production of meat, milk, and eggs soared to new highs. "Maintaining agricultural production at this level in the face of less-than-favorable weather," observed the CIA, "reflected at least partial success for Gorbachev's farm policy."

Industrial growth in 1987 likewise fell from the previous year, to 1.5 percent--discouraging no doubt to those who expected instantaneous results from perestroika, but no worse than the record of the early 1980s. Given the new managerial and financial demands being placed on industry, concluded the CIA, "sluggish performance was almost inevitable." A principal reason for the shortfalls was the introduction of gospriyemka (quality control) during the first several months of the year; until outcries caused the temporary relaxation of the program, inspectors rejected an average of 20 percent--in some cases much more--of all products checked. (One Soviet study traced 35 percent of failures to meet machine-building targets to gospriyemka.)

The decline in industrial production was not universal, but concentrated in areas such as the (admittedly quite important) machine-building sector. In other industries, the picture in 1987 was not nearly so grim. Again using the CIA's analysis, we find increases of 2.5 percent recorded in fuel production, 4.1 percent in electric power, 3.2 percent in chemicals, 3.1 percent in construction materials, and 3.1 percent in food-processing (excluding alcohol)--all quite surprising, given the disruptive effects of reform and the no less significant disruption that the same harsh winter had imposed on the Soviets' far-flung distribution and transportation network. In all but one of these areas, the increases were, despite predicted setbacks, well above the levels achieved in the early 1980s.

A comprehensive assessment of Gorbachev's third full year in power is somewhat problematic because of insufficient data. At the time of writing, the CIA had not yet released its final analysis of the year's economic performance, leaving one to depend on publicly available Soviet figures. These are in themselves not unreliable, however, and in a few cases can be checked against quarterly numbers the Soviets have released. The Soviet figures for 1988 show a third consecutive year of growth, with rates even higher than those of the previous two years.(9) The 5 percent rate of GNP growth recorded in 1988 was not only an improvement over Gorbachev's first two years, but the strongest economic showing in 10 years. Moreover, in two other critical areas, Soviet figures showed the second-largest gains in a decade; retail sales were up 7 percent, and consumer savings were up 11 percent and still rising, another near record. The same figures indicate rather significant gains in the critical machine-building sector (up 6.3 percent), and production levels that either kept pace with, or showed modest improvement over, the previous two years in chemicals, metallurgy, construction, fuel, and food-processing.

Significantly, several republics on the periphery of the Soviet Union have enjoyed appreciably higher growth levels than the Soviet average. Byelorussia, Moldavia, and Lithuania all registered 5 to 7 percent growth rates in 1988. The Central Asian republics, on the other hand, showed slower than average growth. This would suggest that in the European portions of the Soviet Union--where the bulk of population is concentrated and the workforce is better educated and generally better motivated--the reforms are taking hold faster than elsewhere.

Other data, not drawn from these aggregate 1988 statistics, likewise indicate that perestroika is having an impact. The annual number of deaths in 1986 and 1987 was 200,000 below 1984 levels, and the mortality rate of able-bodied men as a result of

accidents decreased by 37 percent--presumably a reflection, in large part, of the anti-alcohol campaign. Average life expectancy rose 2.6 years for men during the same period and nearly two years for the population as a whole, probably for the same reason. Labor productivity was up 30 percent in 1986 and 1987, compared to the early 1980s. Employment patterns were also changing: the cooperative movement, legalized only in October 1986, increased its number of employees from 15,000 in January 1987 to 2 million in December 1988. Employment in the private sector, meanwhile, had spurted from miniscule numbers to half a million by mid-1988. These gains, while small when seen in the context of the Soviet Union's labor force of 155 million, take on greater significance when one realizes that most of the new workers have gone to the woefully underdeveloped Soviet service sector.

The reorganization of industry also appears to be making progress. Take, for example, self-financing, which Gorbachev clearly regards as central to his program. By early 1988, Soviet economists reported that 85 percent of enterprises were operating at a break-even level or better, and by year's end, the proportion had reached 90 percent--presumably a reflection, at least in part, of the successful implementation of self-financing. Price reform at the wholesale level is also apparently making some headway, though specific numbers are harder to come by. During our Moscow meetings, we were told by economist Pavel Bunich that one-third of the prices in the machine-building industry are now being set by negotiations directly between firms, rather than by ministries; he expects the number to double in 1989.

A further, and somewhat anomalous, indicator of the success of industrial restructuring is the fact that unemployment may finally be rising--albeit very slowly. Officially, socialist Russia has no unemployment, although Soviet labor economists have

periodically documented its existence since the 1960s. Much of Soviet unemployment is voluntary, related to job dissatisfaction or discontent over housing (which is predominantly an enterprise, not state, responsibility), and of short duration--usually 30 days or less. Nonetheless, according to PlanEcon, a Washington-based research firm that tracks socialist economies in detail, during the first half of 1988 Soviet industrial employment declined by one million workers, while the number of farmworkers fell by 120,000. Even with net growth in the labor force, PlanEcon concluded that some one million workers were added to the unemployment ranks.(10)

This development may be a positive sign for perestroika, since it probably indicates that enterprises are already responding to the pressures of self-financing and the tough new demands to increase efficiency, especially worker productivity. It may also, as Western observers have frequently warned, spell political unrest for Gorbachev, but that remains uncertain. The best Western estimates of unemployment in the Soviet Union still put it at only 1 to 1.5 percent; whether individual Soviet workers will treat such unemployment levels as a direct threat to their security remains to be seen.

"Capitalist" Reform?

This relatively positive assessment of perestroika's achievements may come as a surprise to Western readers. Our media, after all, have reported consistently on the Soviet economy's continuing problems, shortcomings, and failures. But as with most Western assessments of things Soviet, the observers' assumptions and agenda have been crucial in framing the analysis.

Ever since Gorbachev's rise to power, there has been a fascination in the West with his call for greater use of markets and prices in determining output, his emphasis on domestic consumption, and his push to make the Soviet economy

internationally competitive. This consuming interest in the "capitalist" aspects of perestroika no doubt reflects the fact that much of the West (particularly Great Britain and the United States) has been caught up in recent years in a public celebration of capitalism and its many virtues. As a result, many editorialists (and even some Moscow-based correspondents) have tended not only to see in Soviet reform an implicit admission of socialism's failure, but also to judge perestroika primarily by the extent to which it replicates Western market models. When compounded by a tendency to take Soviet plan targets as realistic goals rather than as ideals or exhortations, these attitudes have produced a flood of exceedingly negative Western reports on the progress of reform.

Thus when the Soviets reported that the grain harvest in 1988 was down precipitously from the previous year--from 211 million tons to 195 million tons--the Western media was quick to interpret it as a failure of Gorbachev's policies. The Washington Post, which led its front page with the news, compared the actual result to the 230 million-ton plan goal and attributed "widespread consumer shortages" to the failure. The New York Times similarly led with the story, but unlike the Post, at least noted that a "U.S. Embassy spokesman" cited widespread drought (which, in the warmest year of the century, had also cut into U.S. and Canadian production) as a major reason for the fall-off. Neither paper chose to put "plan goals" in perspective for their readers, nor did either offer what would have been a more encouraging observation--that grain harvests in the first three years of perestroika averaged (and averaging is certainly a safer way to assess Russia's climate-afflicted agriculture) 205 million tons, up 15 percent from the average of the five previous years.

Similarly, when Izvestia devoted half of an issue in late January to 1988 economic data, the Post, in a story titled "Soviets Falling Short of Economic Goals," commented that the

Izvestia article "indicated that Soviet President Mikhail Gorbachev's economic program of 'restructuring' and 'acceleration' showed precious little of either in 1988." Accurately reporting that national income grew 4.4 percent, "considerably below the targeted 6.6 percent" and that agriculture was up "a minuscule 0.7 percent...far short of the 6.3 percent growth target in the government's economic plan," the article added that the Izvestia account was "particularly gloomy about supplies of food, furniture, TV sets and other household items." Time, using the same Izvestia report, called its own story "The Shaky Fortunes of Gorbachev, Inc." and asked, "With the leader's stock faltering, is a takeover possible?"(11)

But the same Izvestia article had also offered additional information that was ignored in Western reports. Much of the aggregate data was presented in simple four-column tables, and alongside the "plan" and "actual" columns the reader would have found two other important columns of figures: "comparison to 1981-85" (the pre-Gorbachev years of the 11th five-year plan) and "1986-88" (life under perestroika). Under "national income," the reader would have found that while the country's 4.4 percent growth in 1988 was indeed behind the 6.6 percent plan target, it was ahead of the 3.6 percent average achieved under the 11th plan. Overall, agricultural production for the year was indeed a major disappointment, but the attentive reader of the Izvestia story would have learned that agriculture under Gorbachev was growing three times faster than under his predecessors. Moreover, he would have discovered that the agricultural setbacks were heavily concentrated in drought-sensitive grains (where shortfalls were offset by importing 36 million tons) and in fruits and vegetables (where private plots, unaffected by policy reforms, account for the bulk of production). Meanwhile, output of meat, eggs, and dairy products was above plan goals and above

1987 levels, and up an average of 16 percent compared to the early 1980s.

With regard to the "particularly gloomy" consumer goods sector, the Izvestia reader would have found that, compared to 1987, production of television sets was up 6 percent (with color television output up 22 percent), production of washing machines, though below target, was up 6 percent, and production of automobiles was flat at 1.3 million cars. Overall, retail goods production--excluding alcohol--was up 6 percent (or more than 7.1 percent, if the output of cooperatives is included), compared to a 3.1 percent average annual increase before Gorbachev.

The reader would also have seen signs that the structural economic changes sought by perestroika were beginning to take hold. Consumption as a portion of GNP was up, while production of basic industrial commodities (of which the Soviets are voluminous producers, but inefficient users) was flat. Self-financing, meanwhile, had drastically cut the number of money-losing firms; in agriculture, the reported number fell from 6,500 in 1987 to 2,100 in 1988. Labor productivity, a prime measure of the success of the "human factor" campaign, rose 5.1 percent, against the 3.1 percent average annual increase Gorbachev had inherited. Increases in wages and social welfare spending, while still outpacing productivity growth, were more closely in line with the trends of previous years.

None of this information was available to the Western reader, however. Some of the Izvestia statistics were reprinted in daily Soviet press summaries issued by the U.S. government's Foreign Broadcast Information Service (FBIS), but the Izvestia text itself was unavailable. Reliant on the American press, the reader would have found the Soviet statistics accurately reported, but--because of what was omitted--would have been left with a significantly more pessimistic impression than Izvestia itself had actually conveyed.

One must be cautious about chastising the small community of Moscow-based Western correspondents, however. Working under competitive deadline pressures, like journalists everywhere, they are also looking for a dramatic angle that will earn a front-page byline. Accurate information, never a widely available commodity in the Soviet Union, is still unevenly distributed even after four years of glasnost. And then, how does one provide "context" when reporting on a society as turbulent as today's Soviet Union, especially to an American audience never known for its hunger for data-tables, or for its ability to distinguish between five-year plans and annual plans, factor and labor productivity, and the like?

It must be said as well that Gorbachev himself has contributed to the press's tendency to pessimism. Pointing out economic failings is one of the key functions of the Soviet leadership in the cycle of crisis and reform, and even such a consummate innovator as Gorbachev is borrowing from a tradition as old as the Soviet Union itself when he does so. Soviet leaders, having ideologically committed themselves to eschewing self-interest as the primary human motive, and having functioned for more than half a century without material rewards with which to motivate the population, have been forced to rely on exhorting, cajoling, and in general appealing to their citizenry's better impulses and visions of a better society. A Soviet leader who rejects the canons of larger social redemption thus risks violating the country's deepest political impulses. Accordingly, Gorbachev has been at the front lines of criticism whenever perestroika has appeared to be faltering. When the 1988 statistics on the economy were released, Gorbachev went before the Moscow party committee and, in a widely covered speech, itemized the country's shortcomings--down to the shortage of laundry soap.(12) Playing to the deeply embedded Soviet sense of pride and fear, he declared, "of course, we can buy consumer

goods from abroad," but stressed that "it's necessary to develop our own industries." For all Gorbachev's innate brilliance as a tactical politician, his tone and style are not particularly new to his listeners: like any gifted leader he is drawing from the wellsprings of his society's beliefs. Lenin's speeches on the need for the New Economic Policy; Stalin's "motherland" speeches at the outset of the German invasion; Khrushchev's no-longer-secret denunciation of Stalin before the 20th Party Congress--all these displayed the same ability to find fault and expose error, then cast the future as one of hope, provided Russians are willing to sacrifice in the present.

For Gorbachev, the consummate tactical politician, constant highlighting of the country's shortcomings can serve multiple political ends. If consumer demands still are not being satisfied, more sacrifice is needed, but from where? With opponents already rallying against recently announced cuts in the military budget, shouldn't Gorbachev use popular support for sacrifice to help justify such cuts? If party and ministry bureaucrats resist his reforms, isn't a little bureaucrat-bashing in order, to temper the edge of resistance? If indeed the country isn't meeting its economic goals, but is nevertheless performing better than under Gorbachev's predecessors, shouldn't he praise the achievement to secure his position (who then will do better than I?), while underscoring the shortcomings that remain in order to keep the country on the path of reform?

Attacking bureaucrats is a particularly risk-free proposition for Gorbachev, since the bureaucracy is the perceived source of most ills in the Soviet Union. (One antibureaucrat joke we heard told by several different Soviets was about the annual May Day military review. After row upon row of tanks, artillery, and missiles roll by, a half-dozen blue-suited men with briefcases suddenly pass in parade. "What was that?" asks the curious Westerner. "Ah," replies his Soviet companion, "That

is our most destructive weapon of all. Those are the men from Gosplan.") Thus when growth falls short, when crops go unharvested, when plants stand idle, or when goods fall apart, bureaucracy is to blame. Not the often contradictory instructions of perestroika itself, nor even the frequently genteel work habits of the Soviets, but the men in blue suits.

Consumer Conditions: Half Full or Half Empty?

Even if one grants that Gorbachev may be emphasizing economic shortcomings for tactical political reasons, an analysis of Soviet economic performance still provides a mixed picture of perestroika's accomplishments. The Izvestia data, coupled with CIA assessments, present an image of a society starting to move forward--albeit slowly and unsteadily.

But even such a modestly encouraging picture fades immediately in Western eyes when the discussion turns to the question of consumer conditions, which are regularly described in starkest terms by the Western media. One Washington Post article likened Soviet living conditions to those of a "mid-level Third-World country." A description in the Economist assured readers that after four years of Gorbachev the state of the economy was "less like a boom and more like a depression." Told repeatedly of shortages, shoddy goods, and the constant grumbling of the Soviets themselves, most Americans would treat Izvestia's economic data with the same measure of skepticism and indifference they generally reserve for Western economists with their endless prattle about savings rates, productivity gaps, and deficits. For the average American, the question about perestroika still boils down to Walter Mondale's (and Wendy's) 1984 challenge: "Where's the beef?"

On one level, it is clear that consumer conditions remain highly unsatisfactory in the Soviet Union; by Western standards

of convenience and variety, Soviet goods at this stage are miles away from what one finds in the West. But in the consumer-goods area, as in so many other aspects of Soviet life, Western standards are not the best yardstick. Soviets still tend to compare their situation with that of previous Soviet generations rather than with current conditions in the West, and the living standards of the Soviet population as a whole are at an all-time high. (Importantly, this is not true for parts of Moscow's influential upper-middle classes, who are a prime source of information for Western reporters. Under Brezhnev, the system of special stores that catered to the party elite was expanded to include a wide range of the intelligentsia; under Gorbachev, those stores have been closed, cutting off both the party apparatchiks and the intelligentsia.)

Moreover, there is a popular Soviet saying--"What one doesn't find in the stores, one finds in the home"--that a Westerner intent on gaining an accurate picture of Soviet living conditions ignores at his own peril. A remarkable feature of Soviet life is the fact that people of all social and economic levels manage to attain what might be considered "special" or "privileged" conditions. For example, few Western reporters ever explain to their readers that almost <u>half</u> of all Soviet meat production "disappears" into commissaries and cafeterias where Soviet workers can, for a few kopeks, buy a meal whose ingredients never appear in the retail market. Or that a substantial portion of all retail transactions never reach the street-shop level because--especially outside larger cities like Moscow--workplaces themselves frequently provide extensive on-site "retail" services, from delicatessens to dry-cleaners. Even in the retail stores, the persistent and informed shopper can usually--though not always--find what he or she needs. Shortages often appear on a store-by-store basis, rather than uniformly. One store might have toothpaste, but no apples; two blocks away,

the missing items will be reversed. Or fruits widely available in the morning will be gone by afternoon. Because more serious shortages exist--sugar, for example, is in widespread demand to feed the thriving bootleg business created by the anti-alcohol campaign, and coffee (newly popular in this tea-drinking culture) is absent from the shelves for weeks at a time because the Soviets won't use hard currency for imports--scarcity on the margin proves only more maddening. Yet the degree of scarcity doesn't come close to that of a median Third-World diet.

Still, the fact remains that the Soviet diet by Western standards is high in carbohydrates and fats and low in meat, fruits, and vegetables. Even by the Soviets' own nutritional norms, average per-capita consumption of meat is 15 percent below recommended amounts, while that of vegetables and fruits is about 20 percent too low. Bread consumption, by contrast, is 15 percent above recommended quantities, while that of eggs, dairy products, and fish is on target. One caveat here: official statistics actually underreport consumption somewhat, because they omit the output of farmers' private plots. The quarter of the population that is still rural raises 30 percent of the nation's milk, meat, eggs, and vegetables, and 60 percent of its potatoes and fruits, on these plots. Although the farmers consume the bulk of their production, the surplus nonetheless makes its way into urban areas through the state-sanctioned "private markets" where shoppers can supplement their "official" nutritional intake--albeit at two to three times the state prices. (The impact of high private-market prices on overall household food budgets is less than one might imagine, however, since private-market purchases are supplementary to purchases of heavily subsidized state production.)(13)

The Soviet consumer-goods situation is similarly complex, and not simply a matter of inadequate supply as most Western readers believe. In fact, the Soviets have made marked progress

in meeting minimum contemporary consumer demands--at least in quantitative terms. In 1960, only one in ten Soviet families owned a television set, less than one in two a radio, one in three a sewing machine, and one in 25 a refrigerator. Nearly 30 years later, 95 percent had television sets (the majority of them color), 96 percent radios, two-thirds sewing machines, and 95 percent refrigerators. In the same period, automobile ownership increased more than twentyfold to 15 million vehicles, with another 1.5 million added each year; production is scheduled to double in the early 1990s.(14)

Visiting Soviet stores, one generally finds plentiful supplies of refrigerators, cameras, stereos, clothing, shoes (of which the Soviets produce twice U.S. levels), and so forth. But what one finds as well is a serious lack of quality: clothing is badly stitched, and the high shoe output is necessary, as one Soviet shopper told us, "because our shoes wear out three times as fast." As one Western analyst put it, "Soviet consumers are now much closer than they were a quarter century ago to having their basic needs satisfied with regard to food, clothing, shelter, and some basic comforts. Of increasing importance to them is not the fact that a refrigerator, or stereo phonograph, or TV, or pair of shoes is for sale, but whether the quality of those products is higher than what they have."

Improving quality is in fact the critical challenge for the Soviet system, and one that is growing in urgency as increased Western tourism and Soviet reporting on Western consumer realities heighten the contrasts between Soviet and Western goods. It may well be that a late-model Zhiguli (one of the Soviet's seven different automobile lines) provides perfectly adequate transportation, even though equipped with late 1960s technology; for Soviet consumers, the question is why it isn't even better.

Soviet citizens have proven extraordinarily resourceful in finding their own makeshift solutions to the quality problem.

Chief among their strategems is reliance on the "second market" and to a lesser extent on the black market. Over the years, Soviet officials have gradually learned to turn a blind eye to the former, even while severely prosecuting the latter (which often involves the theft or illegal use of state property). In the "second market," Soviet citizens barter, offer small favors, or pay outright in exchange for everything from auto and appliance repair to assuring a better cut of meat from the butcher. In need of a taxi, you flag down a fellow citizen and, for a few cigarettes or kopeks, are taken to your destination. If you prefer a better vacation dacha than the state-run hotels, someone always has a cousin who knows somebody in Sochi or Yalta....

People of all income levels participate in the second market, something that is possible in part because fixed prices and rising incomes (Soviet income has been rising, on the average, between 6 and 8 percent a year for nearly two decades) have combined to create a vast pool of consumer savings--more than $480 billion, or nearly $2,000 for every man, woman, and child in the country.(15) Gorbachev's reforms have gone a long way toward bringing the second economy out of the shadows. As mentioned earlier, the 1986 legalization of individual work and establishment of the cooperative system, coupled with the new emphasis on the "family contract" system of farming, have pushed cooperative and individual employment rates up. This marks a significant success for bureaucratic reform as well, since two-thirds of these nearly 2 million new entrepreneurs have come from the shedding of government and institutional employees, according to Soviet estimates.(16)

One can safely assume that the second market network remains large and crucially important to Soviet consumers even today. A survey by Gregory Grossman of more than 3,000 Soviet emigrants, for example, revealed that this network not only plays a

significant role in providing goods and services, but that it is also important in providing supplementary income--income that the Soviet citizenry relies on for its well-being. In Leningrad, working families added 38 percent to their "legitimate socialist incomes" through extra-official means, while in the Ukraine, the amount rose to 67 percent. Among ethnic Armenians--widely recognized along with Georgians for their "industrious" ways--the amount added to official income was an astounding 179 percent. One must immediately qualify these results, of course, by noting the self-selecting nature of emigrants relative to the Soviet population as a whole, the survey's emphasis on European and urban Russia and Armenia, and the inclusion of black-market as well as second-economy income. Still, as Grossman points out, the survey showed such income widely dispersed among all income groups. Perhaps more striking, the incomes reported in the survey did not even include non-cash support from the public "social consumption" funds, such as medical, educational, or recreational subsidies--which by themselves supplement the average cash income of Soviet citizens by 30 to 35 percent.(17)

In short, both official government calculations and impressionistic reporting of Soviet incomes and consumer patterns tend to paint a significantly more negative picture than actual conditions would warrant. Transactions in the second economy (and for some, the black market) allow a wider range of choices and access to higher-quality goods then are available through official market channels. Incomes for many Soviets are supplemented significantly by work outside "normal" employment. Even when one considers only the official or state-controlled sphere, the inclusion of "social consumption" expenditures (and low taxes) makes net per-capita income higher than is generally recognized.

None of these facts can compensate entirely for the day-to-day frustrations every Soviet consumer must face, but taken together they do undermine somewhat the arguments of those who

imagine that Gorbachev and his program are immediately threatened by consumer dissatisfaction. Politically, what perestroika must grapple with is not an absolute decline in already "Third-World" living standards, but a crisis of rising expectations, fueled by too-easy promises of the quick results reform would bring. glasnost, in a sense, has "liberated" long-simmering complaints about quality in a society that--quantitatively at least--has steadily increased consumer-goods production toward a quite recognizably First World level. Moreover, Soviet society long before Gorbachev learned to accommodate "official" shortages through a network of back-door fixes that Western reporting generally fails to acknowledge. As a result, the Western media have tended to overestimate the potency of consumer conditions as a potential political stumbling block in the current cycle of crisis and reform.

Dangers on the Road to Stage Two

The most serious challenges facing the second stage of perestroika, rather than relating primarily to consumer shortages or declining growth rates, may come from another quarter entirely. Late in 1988, in another glasnost surprise, Soviet officials admitted for the first time that their country was suffering from two well-known Western ills: inflation and government deficits. In a widely-reported address to the party Presidium, Soviet Finance Minister Boris I. Gostev estimated that inflation in the country was running between 0.9 percent and 1.5 percent, and that the government's budget would post a 36 billion-ruble ($55 billion) shortfall in 1989. Western analysts, applying their own estimates to Gostev's admissions, came up with substantially higher estimates on both scores: 5 to 8 percent inflation, and a deficit of more than 100 billion rubles--the

latter figure, if accurate, indicating that Soviet deficits were running close to 11 percent of GNP, or nearly three times current U.S. levels.(18)

Both issues would certainly seem to pose potentially grave threats to perestroika. Yet here too, direct comparisons to Western experience are in some measure elusive--in part because of the sheer difficulty of obtaining accurate data. Take the case of inflation. Contrary to rigid Marxist assumptions about its impossibility in a socialist society, the existence of inflation is confirmed by a wealth of anecdotal material in the Soviet press. But because the Soviets have never published extensive price indices, it is extremely difficult to estimate real rates of inflation for the country with any degree of confidence. The official Soviet estimate of inflation is 0.9 to 1.5 percent; what one doesn't know is whether or how the estimate distinguishes between wholesale and retail prices, and whether it includes the impact of "private" purchases from, say, kolkhoz (collective farm) food markets and the new cooperatives. Western estimates of inflation are consistently higher than Soviet figures because they attempt, among other things, to take into account "hidden inflation" within the Soviet economy. This is the inflation created when, for example, an enterprise produces a "new" product at a higher price that is nothing more than the old product with a new coat of paint. Again, judging from anecdotal material in press reports, many Soviets seem to believe that this is occurring--but to what extent?

The Soviets' own attitudes toward inflation are instructive, as a measure both of their confusion about the issue and of the perplexing nature of inflation in a state-regulated society. For example, Professor Pavel Bunich of the elite National Academy of the Economy has estimated that the current Soviet inflation rate

is between 2 and 2.5 percent.(19) Yet he cites government subsidies to enterprises, delayed or incomplete construction projects, and undelivered consumer goods as all being examples of "inflation," a definition that stretches Western understanding of the concept beyond the breaking point.

Bunich is also quick to note that inflation "is unattended by a fall in the standard of living, because incomes at least keep pace with prices." This appears to be true even if higher rates of inflation are assumed. Aleksandra Biryukova, who heads the Bureau of Social Development (and is the only woman on the Politburo), publicly acknowledged a 3 to 5 percent price increase for a wide range of consumer goods since 1985, and admitted that the price rise of some goods "stands at 17 to 18 percent over the same period." Yet even this higher inflation figure is nonetheless about apace with the 18 percent growth in wages Soviets have experienced in the same four years.(20)

The real question, of course, is how great an impact inflation is likely to have on consumers, and hence on Gorbachev's popular base of support. Prices <u>are</u> rising in the Soviet Union, but given rising wage and savings rates, will Soviet consumers deem higher prices unacceptable? Like Jimmy Carter, Gorbachev is dealing here partly in perceptions--though from a stronger base politically. The immediate response of Soviet workers is likely to be twofold: to the degree that they begin to understand the threat posed by inflation, they will resist its erosion of their income and, more importantly, their savings. At the same time, they will increase their reliance on "second-market" solutions that will not show in official statistics but will mitigate inflation's corrosive effects. Will Soviet workers eventually be angered enough by rising prices (and the lack of quality goods) to withhold effort, and hence productivity gains, from <u>perestroika</u>'s push? That remains unclear.

How great a political threat inflation poses in the long term will depend in large part on how severe the problem becomes. In the near future, it may at least become easier to calculate inflation levels; according to Biryukova, Goskomstat, the government's statistical service, is preparing to issue figures on the Soviet price index. This is a first, and will undoubtedly generate widespread interest among Soviets as well as debate and analysis by Western experts.

Whatever the numbers that emerge in the price index, inflationary pressures seem destined to grow, rather than diminish, as the Soviets enter the second stage of perestroika. The imbalance between consumer supply and demand, coupled to a vast and untapped savings pool and the thriving second and black markets, leaves room for a rapid inflationary expansion. Waiting in the wings, moreover, are increases in basic energy prices (coal and oil are slated to rise by 100 to 120 percent, natural gas by 150 percent) and in major industrial inputs (50 to 70 percent in petrochemicals, 40 percent in metals) scheduled for 1990. Intended both to force greater efficiency on notoriously wasteful Soviet production methods and to boost government revenues, these price hikes are likely to have an inflationary impact as well. At the same time, the implementation of self-financing, the continuing process of wholesale price deregulation, and the anticipated doubling or tripling of employment in the cooperative and private sectors will all exert tremendous upward pressure on the Soviet price system. The government may be forced to choose between ratcheting up or decontrolling retail prices (a step favored early on by Gorbachev and his advisors, but markedly absent from recent discussion), or increasing the volume and extent of government subsidies. Each course of action has its political drawbacks.

The issue for the Soviets, then, is not whether there will be more inflation, but whether it will remain controllable as

well as politically tolerable. A certain amount of inflation is not without its merits. In an economy with a serious imbalance between supply and demand, moderate inflation can play a positive role in creating equilibrium. It can also, as the West knows only too well, lead to severe economic strains. At the moment, Soviet economists are wrestling with the question of how to distinguish between beneficial and harmful amounts of inflation ("controllable" versus "spontaneous" inflation, in Soviet terminology). As Nikolai Petrakov, director of the Central Economics and Mathematics Institute, told us, "There is a world of difference between the two." Unfortunately, he added, recognizing harmful inflation is not the same as knowing how to control it.

The larger of the two shadows looming over perestroika, however, may well be the deficit. According to Gostev, the 1989 deficit will be 36 billion rubles ($55 billion)--by no means an unmanageable sum for the world's third-largest economy, especially since the economy in question is in the throes of radical change.

But on closer examination, Western analysts found that Gostev had not explained a budget item called "borrowing from the state-wide loan fund," a heretofore unknown category that when added, as Western budget-accounting principles would require, to the acknowledged figure, would triple the deficit to 100 billion rubles. Gostev remained silent in the face of this challenge, but less than three months later, Abalkin went public with a warning that unless Soviet spending were brought under control, the budget deficit would reach 100 billion rubles by 1990.(21)

It may well be that this deficit, rather than the lack of "supermarkets, shopping malls and personal computers" is the real specter haunting the Soviet system. For while perestroika does in fact seem to be improving economic output, the existence of such large deficits indicates not merely a continuation of large-

scale government subsidies, but the employment of a Keynesian-like strategy that, improperly managed, could unleash Polish- or even Yugoslav-style inflation in the heartland of Marxism.

A 100 billion-ruble deficit suggests pump-priming on an order that even Ronald Reagan, our Coolidge-by-word Roosevelt-by-deed president, never attempted. To be sure, the Soviet Union started with a level of governmental debt that was only a fraction of the level with which the United States began the 1980s. But the Soviets, because of their inconvertible ruble, are unable to look to the Japanese or Germans to help bail out an otherwise falling currency, as the United States has done. Lacking this external source of relief, the Soviet government nevertheless possesses a significant domestic source of funds on a scale unavailable to Reaganomics: the gargantuan 300 billion-ruble ($480 billion) pool of private savings sitting idle in Gosbank, awaiting the consumer revolution. Yet here too there may be a problem: the "state-wide loan fund" item in Gostev's budget already sounds suspiciously like that very savings pool. Even though personal savings are growing at 25 to 30 billion rubles per year, the fact that the Soviets ran up over 200 billion rubles in deficits (by Western estimates) in Gorbachev's first four years, and may well add another 100 billion in 1989, means that the consumers' 300 billion-ruble savings pool is close to exhaustion.

With consumer savings nearly depleted, and enterprises' retained earnings presumably tied up for the most part in self-financing and reinvestment, the fiscal options open to Gorbachev are bound to narrow. Even with 5 percent GNP growth, he will have to either cut major chunks of the Soviet budget, tax away larger shares of enterprise and individual incomes, accelerate implementation of ruble convertibility, or print more rubles--all to bring the deficit down at least to a rate of 30 to 40 billion per year, in line with overall economic growth.

Not surprisingly to more astute Kremlin-watchers, the Soviet leader appears to be doing all four things at once. Following his U.N. speech pledging a 500,000-man cut in the Soviet armed forces, Gorbachev in January announced a further 14 percent reduction in the Soviet military budget and a 19 percent cut in weapons production. According to Soviet economists we spoke with, the government is also laying plans to substantially expand its tax base this year and next, by expanding existing collection efforts and by raising tax rates on new cooperative and private enterprise income and on the projected profits of newly self-financing industries. In addition, the Soviets have announced that they will take a first step toward ruble convertibility by auctioning hard currency to enterprises engaged in foreign trade and simultaneously granting foreign trade rights to all Soviet enterprises (as opposed to the 150 or so ministries and enterprises that possessed such rights only a few years ago). As for printing rubles, although the Soviets have never published money supply figures (a major gap even now in glasnost), most Western experts are convinced that the government has already sharply boosted the amount of money in circulation and will have no choice but to accelerate the process in the coming few years.

It is therefore too soon to say, as some U.S. observers have, that the Soviet deficit necessarily foretells the demise of perestroika and an unhappy end to the latest cycle of economic crisis and reform in the Soviet Union. It is encouraging at least that Gorbachev has acknowledged the problem and embarked on an energetic effort to confront it--although this in itself by no means guarantees success, as American presidents have found to their great chagrin.

What is clear is that the success of the reform process is by no means assured. Deficits and inflation are just two of the potential pitfalls (albeit the most serious) awaiting Gorbachev.

In coming years, any of a number of other specters could rise to haunt perestroika. Despite improvements in living standards, Soviet consumers are clearly unhappy that progress in this area is not as rapid as they were promised at the beginning of the reform process. Agriculture, always a trouble spot for the Soviet economy, will require substantially and consistently better weather patterns than the fates have dealt in the last two years--and greater implementation of the reforms already on the books. (Oleg Bogomolov told us, for example, that as of late 1988 less than 2 percent of kolkhozniks had availed themselves of the right to contract out of state farms and into private, leased-land farming.) In industry, where the most rapid progress has been made, efforts to implement price reform are likely to usher in a heated debate over the monopoly characteristics (and consequent resistance to price reduction) of the major Soviet enterprises. Meanwhile, cooperatives and small-scale private enterprises, while showing phenomenal growth, are already attracting consumer resentment over their high prices--so much so that in early 1989 the government issued decrees barring them from certain key trades: publishing, video rental, and (in a backhanded Marxist bow to religious tolerance) sale of religious articles, which will remain a lucrative monopoly of the Russian Orthodox Church.

None of these problems is inherently insurmountable, but taken together they represent an acute challenge to the Soviet leader and his policies. Having already achieved more than his predecessors in managing the Soviet crisis-reform cycle, Gorbachev has also risked more by raising the stakes for reform across the board--with the consequent possibility of equally great failure.

Reading the Next Step

Yet if there is any lesson we should have learned from Gorbachev by now, it is that we should not underestimate him. To date, Gorbachev has in many respects exceeded not only the achievements of previous Soviet leaders, but the expectations of critics and friends alike. He has consolidated his political base. He has opened up Soviet society in a remarkable fashion with glasnost. His program of perestroika, while incapable of meeting the inflated expectations of the current five-year plan, has nonetheless reversed a 20-year decline. Enterprises are learning the responsibilities of self-financing and are beginning to face market realities by negotiating their own prices (so much so that the success of some engineering and construction firms has sparked debate over the "socialist legitimacy" of 30 to 40 percent profits). Bureaucratic ranks and bureaucratic privileges are being scaled back (Communist Party administrative staffs alone have been cut 40 percent). Massive investment in industry and raw materials is being brought down, while new emphasis is being placed on the satisfaction of consumer demand. The Soviets seem anxious to cut even further into their oversized defense budget and begin substituting trade and investment for a decades-long history of military and political confrontation.

Casting a shadow over all this, of course, is the question of how the Soviets will handle their inflation and budget deficit problems. Positions are already being staked out; citing the perils of a 100 billion-ruble deficit, Abalkin has warned that real satisfaction of consumer demands may have to be deferred until well into the 1990s. Aganbegyan, on the other hand, has called for a 30 percent cut in investment in heavy industry and defense, a step designed to continue the priming of the consumer pump, but sure to alarm industrial managers and the military.

As the 13th plan is put into place during the coming year or two, the answers to the following questions are likely to reveal a great deal about the reform effort's progress:

- If the Soviets begin publishing inflation figures as promised, what are they, and how are they calculated? Do they only use "official" prices that will understate real inflation, or do they try to include private-market food prices and the like?

- If the Soviets release money supply figures (not yet promised), how fast are the numbers growing, and are they in line with economic growth? If the numbers are growing much faster than GNP, than serious inflation could rapidly become a problem.

- On the rocky road to ruble convertibility, what new steps have been taken, and which industries will they most affect?

- With more than $12 billion already pledged by European governments and businesses last year, will the Soviets continue to seek new foreign credits and investment? If so, how much and for what purposes? Will they begin to draw on these credits to import consumer goods?

- Does the shift to self-financing appear to be succeeding, and are negotiated prices, rather than centrally set ones, the norm for wholesale production? (Newsweek recently reported the encouraging fact that half of all prices are now negotiated.) Is the plan to implement retail price reform finally in place? Does it include reduction of the subsidies for housing and food, especially meat, that now constitute 80 percent of the government's annual 100 billion-ruble support of the consumer market? Are the cuts offset by "food stamps" or their equivalent for the poor, the sick, and the elderly?

- Are bureaucratic ranks still being cut, and are economic decisions increasing the power of enterprises and regional, or local, authorities?

- Does Soviet agriculture, after adjusting for the unpredictable effects of weather, continue boosting output, and are increasing numbers of farmers choosing to opt out of the state system and into land-lease programs?

- Are the debates about the direction of Soviet economic policy increasingly conducted by the new People's Congress, instead of being limited to the Presidium or Central Committee? If so, what long-term economic strategies are emerging?

- It is safe to assume that these questions will not all be answered with a resounding "yes." Still, they comprise a useful watch list by which the West can measure perestroika as it enters the second stage. Setbacks in a few areas are inevitable, but if the Soviets seem unable to make progress in the majority of them, the likelihood of trouble ahead--for Gorbachev, for the Soviet Union, and ultimately, for the West--will rise.

In assessing perestroika, it is important not to applaud only those reforms that meet Western market criteria. With the benefit of hindsight, initial Western fantasies that perestroika would lead inevitably to the rebirth of capitalism on Soviet soil now seem naive; so, too, do the early Soviet hopes that change would quickly and painlessly bring forth a new cornucopia of wealth and security.

Yet the determination to change Soviet society shows few signs of waning. Late on a fall afternoon in Moscow, toward the end of a lengthy discussion of the propects of perestroika, I asked Oleg Bogomolov what he hoped the Soviet Union would look like 20 years hence. "Sweden," he replied after a moment's

reflection, "Sweden or perhaps Austria." To imagine the world's greatest Communist power--for so long the prime source of Western fears--as a prosperous and peaceful social-democratic nation seemed to me an enormous leap, perhaps even an impossible one. I wondered later, as I walked through Moscow's streets back toward my hotel, what for a man like Bogomolov--who has lived under Stalin, Khrushchev, Kosygin, Brezhnev, Andropov, Chernenko, and now Gorbachev--such a leap could mean.

Postscript on the People's Congress

Following completion of this report, I had the opportunity to meet, in the wake of the widely-covered new Soviet national congress, with two senior staff members of the Central Committee and with Prof. Pavel Bunich, an economist elected to the Congress itself.

What characterized the Congress--related to perestroika -- was its willingness to accelerate the crisis-reform cycle in both scope and pace.

Further cuts in the Soviet's defense budget are imminent--as much as 60% of the military hardware budget, according to Bunich, is slated for cuts in the next two years. Land-leasing by the peasants will be vastly accelerated by removing control of the process from the hands of existing farm committees and managers, who, understandably, resisted reforms. More than 30% of existing ministries will be abolished outright. Gosplan's previous role of outlining production goals down to the smallest items will be severely curtailed. According to Prime Minister Rhyzkov, Gosplan will henceforth provide only broad, indicative planning goals, and "state orders"--the instrument of Gosplan's power--will be made voluntary.

Enterprises themselves--the heart of Soviet industrial power--will be increasingly turned over under long-term leases to the enterprises' workers themselves. And significant new investments in consumer goods production--already slated for 30

billion rubles of investment--will be further accelerated by more transfers of capital from defense and infrastructure projects.

The sheer scale of these changes is likely to impose further constraints on aggregate growth, and increase inflationary pressure. But the shift in composition of output--toward consumption, away from heavy industry and defense--enjoys such widespread political support (if gauged by the Congress) that its disruptive effect is hard to judge overall.

Ironically the next major step for the Soviets may have to be in the area of antitrust legislation, since the transfer of "ownership" from state to enterprise workers ought not to have any initial constraining effect on prices. (If anything, it may accelerate price increases, and a shift from lower-priced, lower-margined goods to higher-priced, higher-profit products.)

And here there will come severe deficit problems. To maintain political legitimacy, the Congress announced the doubling of minimum pensions (to 70 rubles per month), and plans to index pensions and the minimum Soviet wage to inflation. But as Western economists know too well, this will not cure the diseases the Soviet economy suffers--especially in a world unused to market-adjusting prices.

Hence, for Americans, the picture of the Soviet economic reforms is likely to grow more, rather than less, complex. What one can say is that they are proceeding now perhaps even faster than Gorbachev himself could have imagined even two or three years ago, and that the stakes have been raised immensely.

And, perhaps most important, the reforms are moving the Soviet Union from a point where perestroika's success can no longer be judged by the premises of central planning, but rather through the logic--with its inherent defects and strengths--that has governed the debates that Americans have carried on for the last two centuries about their own much more familiar world.

1. Joint Economic Committee of Congress, Allocation of Resources in the Soviet Union and China, Hearings Before the Subcommittee on International Trade, Finance, and Security EcOnomics, 98th Congress, First Session (Washington, DC: Government Printing Office, 1984), part 9, p. 2.

2. "On the Convocation of the 27th Party Congress," Kommunist, No. 7 (May 1985), p. 6.

3. Nathan Gardels, "Communism: All That Is Sacred is Profaned," Wall Street Journal, January 26, 1989.

4. Ed A. Hewett, Reforming the Soviet Economy, (Washington, DC: Brookings, 1988), pp. 39-48.

5. Ibid., p. 222.

6. Abraham Becker, "Gorbachev's Program For Economic Modernization and Reform," testimony before Joint Economic Committee of Congress, Hearings Before the Subcommittee on National Security Economics, September 1987 (mimeo), p. 2.

7. Mikhail Gorbachev, "Basic Theses for the Radical Restructuring of the Management of the Economy," Pravda, June 27, 1987. See also Mikhail Gorbachev, Democratization: The Essence of Perestroika, The Essence of Socialism, (Moscow: Novosti Press Agency, 1988).

8. U.S. Central Intelligence Agency, "Gorbachev's Economic Program: Problems Emerge," paper presented to the Joint Economic Committee of Congress, April 1988 (mimeo). See also the CIA's "Gorbachev's Program: Motives and Perspectives," September 1987 (mimeo).

9. Izvestia, January 21, 1989.

10. PlanEcon Report, Vol. 4, Nos. 32-33 (1988), p. 2

11. Washington Post, January 22, 1989, p. A25; Izvestia, January 21, 1989; Time, January 30, 1989, p. 37.

12. Foreign Broadcast Information Service (FBIS), SOV-89-013, January 23, 1989, pp. 47-52.

13. USSR Yearbook '88 (Moscow: Novosti Press Agency, 1988), p. 180.

14. Hewett (fn. 4), p. 85; USSR Yearbook '88 (fn. 13), p. 280; Business Week, October 31, 1988, p. 50.

15. Author's conversation with Leonid Abalkin, Moscow, September 14, 1988.

16. Financial Times, January 23, 1989, p. 2.

17. Gregory Grossman, "Roots of Gorbachev's Problems: Private Income and Outlay," in Gorbachev's Economic Plan, Study Papers of the Joint Economic Committee of Congress, (Washington, DC: Government Printing Office, 1987), pp. 213 to end.

18. For Gostev's speech and Western analysis see PlanEcon Report, Vol 4, No. 41 (1988), pp. 7-11.

19. "Economists on Unavoidable Inflation," Moscow News, January 15, 1989, p. 10

20. "Meeting the Press: State and Prospects of the Non-Foods Goods Market," Foreign Broadcast Information Service (FBIS), SOV-89-014, January 24, 1989, p. 24

21. Abalkin warning appears in "Soviet Economic Forecast: Be Patient," Washington Post, January 26, 1989, p. 1.

The CHAIRMAN. Thank you very much indeed.

I would like to ask one question that requires a very brief reply from each one of you, and that regards the proposal to waive Jackson-Vanik a year or two.

What do you think, Dr. Hough?

Dr. HOUGH. Certainly if one wants immigration to continue when it went up to 50,000 in 1979 when they were then linking it with START, we did not ratify START and the immigration went down. It is now linked with lowering the tariffs. It is at a 50,000 level thus far this year. If there is no American response they will respond by tightening immigration.

The CHAIRMAN. Thank you very much.

Dr. Hewett.

Dr. HEWETT. Yes. I would waive Jackson-Vanik. Giving the most-favored-nation treatment will have almost no effect. Resumption of official credits might have some modest effect, but I would waive it.

The CHAIRMAN. Thank you.

Dr. Shelton.

Dr. SHELTON. I would definitely not waive it. The Jackson-Vanik amendment is right—but for the wrong reason. It makes no sense to pay off the Soviets just because they are finally beginning to comply with world standards of basic decency. It does make sense to withhold taxpayer subsidized credits from the country that is largely responsible for our own enormous defense expenditures.

The CHAIRMAN. Mr. Robinson.

Mr. ROBINSON. I have not yet seen sustained compliance or broad enough compliance with the Helsinki Accords, Mr. Chairman, to be comfortable with that. I think it should be maintained, particularly concerning restored Soviet access to the United States Export-Import Bank. As Senator Bill Bradley and others have articulated, taxpayer guaranteed and direct credits should be phased out on an alliancewide basis. These types of credits represent a subsidy and should be treated quite separate from Jackson-Vanik as practices undesirable for the entire alliance.

The CHAIRMAN. I think, Mr. Robinson, you proposed that the Soviet Union bear half the economic burden of helping the Polish economy. This is an interesting idea. I would like to ask the other panelists what their views are as to whether that is realistic and whether the Soviet Union has the economic wherewithal in order to do this.

Dr. Hough.

Dr. HOUGH. The conservative policy for the last 4 years has been to set up barrier after barrier for the Soviets to jump. First we would trust them if they get out of Afghanistan or if they meet the three conditions in China or if they cut troops or if they put forward an unbalanced treatment, an unbalanced arms reduction at Vienna.

Each time, unfortunately from a conservative point of view, the Soviets have jumped it. They have met the condition.

Now the condition is meet our unconditional conditions in Eastern Europe. One, it seems to me not only unrealistic but it seems to me dangerous and extreme because we are now in the business of saying in one way or another Poles should be free, Czechs should

be free, Hungarians should be free; but, of course, we do not want free East Germans.

I am not sure about Mr. Robinson, but in general as we begin getting into the question, unless we are willing to face up very frankly to the question of reunification of Germany in the next 4 or 5 years, it seems to me we are just totally destroying our propaganda position in Western Germany by simply concentrating on Poland and Hungary.

The CHAIRMAN. Thank you.

Dr. Hewett.

Dr. HEWETT. Mr. Chairman, I disagree with Mr. Robinson. There is constant tension in our policymaking between getting something done and making a point, and I think this is another example of trying to make a point.

In the first place, the administration actually has offered very little to Poland. Of this so-called $1 billion package, most of it would be IMF and IBRD credits which would come with significant conditions that are not yet agreed upon.

The most important thing is to help Poland rejoin the free world and to do it in an economically viable way. There, Mr. Robinson and I agree. If we precondition our participation on the Soviets agreeing to pay half of it, which they will not do, then what are we going to do? Say "No"?

Finally, I do not believe it is in our interest to sit down right now with the Soviet Union and talk through the future of Eastern Europe. Things are going our way in Eastern Europe. Why should we hit the Soviets over the head with it, in the process possibly forcing more of a debate there than they now have about this, from their point of view, rather unpleasant process?

The CHAIRMAN. Thank you.

Dr. Shelton.

Dr. SHELTON. I think it is an intriguing concept, and it would certainly help to clarify Soviet interest in Poland. The Soviets have long asserted political control, and they certainly insist that they have vital military interests in Poland. They have not been willing to extend this same domination into the financial realm and stand up for Poland in terms of economic assistance or its ability to bring in financial credits from the West.

So, perhaps this is the time to make them take full responsibility for the interest they care to assert.

The CHAIRMAN. Thank you.

Mr. ROBINSON. Just one brief comment, Mr. Chairman. I think we should recall that Soviet imposition of their failed centrally controlled economic system on Eastern Europe is the single greatest cause of the economic and financial crisis currently afflicting the region. So, let us clarify the responsibility issue.

Second, I am concerned about the "internationalizing" of perestroika which I define as the offloading of the Soviet Union's financial obligations to its impoverished allies and client states from Moscow's books to Western balance sheets. You look at this approach repeated from Vietnam to Managua, from Poland to Hungary. It strikes me as something we have to be attentive to and avoid. It is unwise for the West to pick up all of these tabs without any kind of burdensharing on the part of the Soviet who have the

creditworthiness and hard currency to work with us in a constructive way.

The CHAIRMAN. Thank you very much. Because of time constraints I will desist from further questioning at this time.

I turn to Senator Sarbanes.

Senator SARBANES. I appreciate the panel's being here. I want to follow up on the line of questioning which the chairman just asked. We have to deal with actual policies.

I take it, Mr. Robinson and Ms. Shelton, that your view is, from what you have just said, that there should not be a Western economic package of any sort for Poland until the Soviets have been brought into the economic assistance programs; is that correct?

Mr. ROBINSON. No, Senator Sarbanes. I am suggesting that this is one of the considerations that we should pursue in tandem with making sure that we are going to achieve in Poland maximum bang for the buck. That is to say——

Senator SARBANES. I want a direct answer. You say that if these reports are correct, the administration may be embarking on a course which could cause incalculable harm to U.S. national security and alliance relations whose potential commercial benefits would likely be modest at best. Now that is a pretty strong statement and it is certainly a position, but I want to make sure I know exactly what that position is.

I take it your position is that it is a mistake to provide any sort of an assistance package to Poland unless you have drawn the Soviets into the undertakings that you have set out in your paper; is that correct?

Mr. ROBINSON. The comment that you cite, Senator, deals with the broad spectrum of Western economic and financial dealings with the Soviet bloc. The "incalculable harm" statement was not targeted at Poland. When you consider liberalizing technology transfer to the U.S.S.R. and the consequences of, say, the Toshiba technology diversion case, it is very clear where the term "incalculable" comes from.

When Soviet submarines can silently slip to within 6 minutes flying time of their missiles from our coast because of an economic transaction, I think it makes the point on the possible costs of liberalizing restrictions on military-relevant Western technology. So, it was a broader concern which was referenced in my introduction.

In terms of Poland, my point is not to withhold Western assistance until Soviet participation is secured but, rather, that Western assistance should be conditioned on massive privatization of the economy, that certain goals and public milestones be reached by Warsaw at which time we can make various disbursements of funds. In this was we can proceed in a very organized and careful fashion to use our financial leverage and disbursements of loans to make sure that we are achieving genuine structural economic reform, which is the only chance for success in Poland. Otherwise it is good money after bad.

I am not saying that the Soviet——

Senator SARBANES. That involves Soviet burdensharing in Poland?

Mr. ROBINSON. I think that Soviet burdensharing in Poland would be a very useful idea to pursue, but it is not necessarily a precondition——

Senator SARBANES. I understand that.

Is your view on a Western economic package for Poland conditioned on Soviet burdensharing?

Mr. ROBINSON. No. It is not a firm precondition.

Senator SARBANES. Second, you think that drawing the Soviets into such a supportive arrangement would serve Western interests; is that correct?

Mr. ROBINSON. I certainly do. When the United States is facing some 39 countries, as you well know, Senator, in the developing world who are calling on the finite resources of the IMF, the World Bank, the Paris Club, with possible large-scale Western taxpayer implications, I think that the Soviets, who bear a substantial responsibility for the Polish economic crisis, could use their fine credit rating in Western markets to guarantee Western loans to Poland and put in some hard currency of their own in a supportive fashion. Otherwise, they simply walk away.

Senator SARBANES. So, you think that instead of drawing Poland away, in effect, we should enter into a coarrangement with the Soviets with respect to Polish economic problems?

Mr. ROBINSON. As you will see in my testimony, Senator, it is not that way at all. Soviet financial support would have to be conditioned on our same goals of privatization, political pluralism, and all of the other requisite steps. So, this is not support for an idea of allowing the Soviets, by participating financially in a Polish rescue effort, to help maintain the firmness of their control. Obviously I share the goal of Eastern Europe being pulled away from the Soviet orbit.

Senator SARBANES. This is all hypothetical, but working through your thinking, what do you say if they are willing to put in the money but not to accept the other conditions?

Mr. ROBINSON. Then we should not take their money, because what is more important——

Senator SARBANES. What do you say to the Poles about that at the same time that you are trying to draw out of the Soviet orbit? If the Soviets say we will put in some money but we are not going to agree to all these other conditions, then you say "No, no, you cannot have the money"? Is that it?

Mr. ROBINSON. I think that right now the Council on Mutual Economic Assistance, the so-called COMECON association, is draining very valuable resources out of Poland. Soviet enterprises are absorbing many of the high quality manufactured goods that Poland needs to export for hard currency earnings and the revival of its economy.

I am saying that these are the kinds of conditions that we should impose hopefully with Soviet acceptance, or we are going to have a thousand holes in the bottom of the boat that we are pouring cash into.

My principal hope is that the Soviets would perhaps cooperate in the interest of maintaining stability in Poland, which I think is a shared interest, and I think, at minimum, we should explore with Moscow whether something constructive could be accomplished.

I am not anxious to have the United States in the West alone picking up the tab for failed client state and Soviet allies across the globe which is, I believe, the Soviet agenda.

Senator SARBANES. I think that is a reasonable concern, but why you then substitute for drawing the Soviets into this economic arrangement I am hard put to understand.

Do any other of the panel want to comment on this? Anyone else?

Dr. HOUGH. I would associate myself with the questions that you have been asking. It seems to me they have been very good questions.

The thing that concerns me, I must say, is that it seems to me that in general we have a tendency in this country to be back in the mid-1970's; that we are concerned with issues that are rather trivial from the point of view of our national security interest.

The 1980's, it seems to me, has been a period of very significant decline in the American power. The other superpower has been Japan. Our economic position vis-a-vis the Japanese, our political position, is much weaker.

It seems to me to worry about should we subsidize grain for $1 billion to the Soviets or should we score some point with some unrealistic point on Poland is not where it is at.

I think one has to understand that the end of the postwar period is over. The Russians are beginning to respond to the looming Chinese and Indian threat; that is, in 20, 30, 40 years, the Chinese, the Indians, both on the Soviet border, are going to be 1 billion people each, huge superpowers. You can imagine how the United States would be nervous now if Mexico at its level of national development had 1 billion people on our border with some unhappy history about California and Arizona. That is what the Soviets are responding to.

Essentially, Gorbachev has seen that we in the West have created a common home of 600 million Europeans from the Elbe to San Francisco, and he is essentially in the process of joining that.

Poland and Russia are part of Europe. It is not just a different world.

Senator SARBANES. Let me put a question to Ms. Shelton before my time runs out here.

It is an interesting issue, I think, whether it is to our interest to ease the internal economic pressures that are the driving force behind perestroika.

The question one has to consider is whether at some point, if perestroika does not produce results, in fact you will continue to have a driving force for these changes. In the last sentence of the paragraph at the top of page 6 you say the very transition process that we yearn to see taking place, so you have made a judgment about the process and its desirability, I take it, from that statement.

So, the question becomes at what point, if they have embarked on this process and it is not producing results, will that shift from further impetus toward trying to achieve results and result instead in a reaction in which perestroika will be abandoned.

Dr. SHELTON. I think it is clear to Gorbachev that to restore any kind of productivity to the Soviet economy he needs to divert resources out of the military sector, which is basically unproductive,

and into the consumption sector, which is how you go about increasing GNP.

So, to the extent that he feels this pressure, I think that is the kind of pressure we want to see sustained.

Senator SARBANES. I understand that, but your next sentence in your own statement goes on to say, "Then there is the sobering question what happens if Gorbachev fails and is replaced." You have in a sense raised the dilemma yourself right in the statement, and it just follows right in there.

So, the question is still appropriate. In other words, you have a problem of wanting change to take place—which according to this statement I take it you want—and keeping pressure on to bring it about; and, on the other hand, if they are trying to make the change and it does not produce results, might not the whole process be abandoned, as you suggest at the beginning of the next paragraph.

Dr. SHELTON. My point is I think it would be a mistake for the United States to establish its entire economic and financial posture toward the Soviet Union based on Gorbachev. He could be around a long time or——

Senator SARBANES. I accept that proposition. I do not really want to argue scarecrows. I do not want to argue the extremes. I want to get a focus on real problems just as we tried to do on the Polish issue. I do not want to be out at the extremes.

The question is, is there a problem now if at some point you are trying to encourage perestroika and perestroika does not produce results, you may in fact end up discouraging perestroika?

Dr. SHELTON. I believe that you are raising a bogeyman. This idea that if Gorbachev fails then the next fellow is automatically going to be very hostile—perhaps the head of the KGB, or the Soviet Minister of Defense. The question that is often put to me is: Do we want to help Gorbachev to make sure that this relatively nice guy stays in?

I believe that the next——

Senator SARBANES. I am making no judgments about whether Gorbachev is a nice guy or not a nice guy. I think there are fundamental underlying interests that we have to protect.

The question is, you apparently want to encourage perestroika. Now you can encourage it up to a point by putting on pressure, so they try to bring about the changes. If those changes do not produce results, the question becomes, is there not the danger that the process of trying to achieve perestroika will come to an end and you will get a reaction in the other direction?

Dr. SHELTON. I do not think so, no. I believe that the next person would be facing the same set of economic and social pressures that Gorbachev is dealing with, and any kind of pragmatist is going to find himself wanting to continue the reforms and not wanting to turn them back.

There is no way out by turning hostile.

Senator SARBANES. Why, if they are not producing results, would he continue them?

Dr. SHELTON. What is his choice?

The CHAIRMAN. I think we really should desist.

Thank you very much, Dr. Shelton.

Senator Biden.

Senator BIDEN. I will yield to Senator Robb, who has been here for quite some time.

The CHAIRMAN. Senator Robb.

Senator ROBB. Thank you, Mr. Chairman.

I was going to follow up on precisely Senator Sarbanes' question. I was going to raise it, and I do not want to let it go at this point. I think that what is troubling Senator Sarbanes and is troubling me, too, is the question of what are our interests, what do we want to see achieved, do we want to see perestroika regardless of personalities succeed, particularly through some of the reforms that have been discussed, or do we want to remove the incentive that some success brings with it and assume that the only way perestroika is going to go forward or whatever we find desirable in perestroika is the absence of success, and at what point does frustration take over, at what point do the forces of politics take over, at what point does the military interject itself into this whole equation; if you are in effect saying you do not want to provide any outside assistance, whether government or through the private sector.

Dr. SHELTON. I think it is scary either way. I mean, we talk about whether it will proceed successfully or not. I do not think we want to make the Soviet Union a strong economic rival, and, then assuming they still allocate the same percentage to the military that they do currently, find ourselves facing a much stronger military rival with a much stronger economy.

We have seen, perhaps, a glimpse of the future in Poland, and the fact that the more internal economic pressure there has been on the Polish system, the more pluralism has been able to surface. I think the economic pressure is precisely what has forced Jaruzelski to recognize Solidarity. He was able to ignore it so long as the country could survive economically.

When things get to the point of desperation, when people go on strike, when there are no goods in the stores, when the country simply is not economically viable, that is when you are able to, I think, implement true democratic reform. You start when the people assert their right to say how the country should be run.

Even though it is hard to stand by and see the standard of living go so low—and it becomes particularly dangerous with a country like the Soviet Union—I still think it makes more sense in the long run not to capitulate, not to ease the pressure, but rather to insist that they work through their own problems. The Soviets need to see the light in terms of what it takes to become more productive. Part of that effort involves emerging democratic reforms, and that is the type of transition that we want to see.

Senator ROBB. Do you think that the process can continue to move forward even if there is no evidence in the stores, shorter lines, more produce available, more consumer goods, whatever the case may be; some tangible evidence that would allow Gorbachev or his successor, whoever that might be, to continue to move forward or to give some argument in opposition to the more conservative forces within the Politburo and elsewhere that would suggest that all of this perestroika has been wrong, we need to move back toward a managed economy, increase our reliance on military support and put the world right back into the Cold War?

Dr. SHELTON. I think that progress is definitely what people need to see in the stores, but it should be genuine progress that they have brought about through their own efforts. To the extent you bring in Western consumer goods, it is very artificial. It will give people the impression that things have improved, and then suddenly the loans dry up and the country has problems paying them back. You have not really made the changes within the Soviet system that would sustain it and keep this progress continuing in the future.

Senator ROBB. I would suggest that argument could be applied to our current budget debate in this country, and I will not draw the analogy beyond that particular point.

With respect to the permanency, I think you have a sense that the forces that are at play currently are somewhat inevitable and a change in personalities is not going to alter the course.

Is that generally shared by the other members of the panel this morning? That seems to be the question most on the minds of anybody who is attempting to come to grips with policy questions in this arena.

Is it a personality-driven change, or are the factors so overwhelming that even a change in personality or failure to achieve some of the objectives is going to keep the process moving forward?

Dr. HEWETT. Senator Robb, if I could respond, I feel very strongly that, first of all, the whole debate about whether or not Gorbachev will survive—does he have a year, does he have 15 months—has diverted us unnecessarily.

For some time a number of us have felt that he was in an extremely strong position, and recently the evidence has been quite public in that in what he has done in the Central Committee Plenum.

So, I do not think it is worth worrying a whole lot about whether this person is not around a year or two from now. Indeed, the real issue is what is he going to do as he does go through a very long hard period of disappointment.

The basic point is that this is not an externally driven process, but rather a process driven in the Soviet Union. There is not a lot we can do about it one way or the other. To the extent we can do something, it should not be to write Gorbachev a check.

I think Dr. Shelton is quite right in emphasizing that the way out of this is for a true radical reform. There are ample indications in the Soviet Union that they do understand that. They are searching for a way to make the reform work. I am working with Soviet economists on this issue. It is not an easy problem.

Western Sovietologists basically advise the Soviets to create a market system. But then you ask us how to do that, and we say we do not know. No one really has a good formula for how you get from a system that has inherited 60 years of inefficiency to a system in which markets operate, and survive the trip. It is not an easy problem.

Finally, suppose Gorbachev had a heart attack, and that he is suddenly out of the scene. The forces operating in the Soviet Union that brought Gorbachev to power are strong, powerful, deep forces and it would be extremely hard, particularly given the last 2 years, to go back. If Gorbachev left the scene another man or woman

would probably might emerge who would be a leader. He might not be as charismatic as Gorbachev, as a much of a world class politician, but I find it very difficult to conceive of this system going back to the Brezhnev period.

Senator ROBB. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Biden.

Senator BIDEN. Thank you very much. I apologize to the panel for being late and not hearing what you had to say, although I have read at least two of the statements and have read a good deal of what each of you have said on previous occasions. That means I know just enough to be confused.

Let me ask a couple of questions. I will start with you, Dr. Hewett, and begin where you ended about how much control we have or do not have. It seems to me we are being dutifully self-centered in the way in which we talk about the economic initiatives we or anyone else in the world may take and how they will fundamentally affect what happens in the Soviet Union.

From what I can see, the Italians are falling over the Germans who are trying to grab the pant leg of the French who are trying to get before the English who were there before the rest of the European community to figure out how they are going to somehow be more involved directly with the Soviet Union.

I have been back a month now from a meeting with the leaders of the European Community and they are all talking in terms that were hard to believe 5 years ago. They are talking about integration in the near term hopefully of Hungary, or whether or not Poland is going to participate in the West in terms that 3, 4, or 5 years ago no one discussed. As I understand it, they treat East European integration, at least everyone that I spoke to, as a fait accompli. They will be integrated economically somehow into the broader European Economic Community. They do not know how it is going to happen.

One of the things I kept asking and would like to ask all of you is this. People make the comment you make, Dr. Shelton. They worry about whether or not we are going to help make the Soviet Union an economic juggernaut that will allow it to regain its pace of military buildup and world domination and that we are going to be worse off at the end of this process.

It always surprises me that hardbaked capitalists think there is any way, taking into consideration the system that exists in the Soviet Union and its relationships with the international community, that the Soviets could ever be competitive absent a fundamental change in their economy.

So, that is the question I have. Is there anything that any of you can think of that could make the Soviet Union a major competitive economic power, competitive with the United States, Japan, West Germany, absent a fundamental change in the Soviet economy? Is there any way they could become competitive?

Mr. Robinson.

Mr. ROBINSON. First, I would say, Senator, that I tend to agree with your argument that radical systemic reform in the Soviet Union is going to be the largest single precondition for success. I think that there is, however, a danger of minimizing the West's po-

tential role. Many people seem to be saying, "It does not really matter what we do or do not do, this is up to the Soviets." Does this imply that we should dismantle COCOM?

Senator BIDEN. Keep in mind that is not what I am saying.

Mr. ROBINSON. I understand.

Senator BIDEN. I was saying our impact on the West.

Mr. ROBINSON. Very much so, but let me give just a couple of specific examples. Take high-technology competitiveness, you have seen the figures on how far ahead we are in most major categories there. This is an area where the West has a definite competitive advantage. Soviet access to this technology can spur on and leapfrog generations of development and R&D, save billions of dollars of their own research efforts, and instead piggyback on our own.

The second example concerns hard currency—80 to 90 percent of the Soviet Union's annual hard currency income of about $32 to $38 billion a year is derived from just four export items: oil, gas, arms, and gold. Moscow's access to hard currency, therefore, in terms of credits and so forth is vitally important. You cannot make purchases in the West with rubles, and you know how important our equipment is to the Soviets.

Third, joint ventures are primarily a tool the Soviets can use to build a diversified base of exportable manufactured goods to change the very situation we are talking about. Joint ventures are being sought after aggressively by the Soviet Union, and, in my view, that is why.

Finally, energy cooperation. You know the problems the Soviets have had with their oil exploration and extraction. About 66 percent of their earnings annually are from oil and gas exports. They need our technology such as seismic equipment and drill bits, to get through permafrost in Siberia and to operate in harsh climatic conditions like the Barents Sea. We still have the keys to unlock those resources for the Soviets.

So, I tend to agree with you but with the proviso that we not minimize the role that the West can play in allowing the Soviets to skip years and even decades of development efforts depending on our policies.

Senator BIDEN. Dr. Hewett, I would like you to respond to that, and I might note parenthetically that it is interesting that everything you said is what a lot of us were saying. I was a very, very tiny voice, but a lot of people in this country were saying this at the beginning of the Reagan administration when we were told how powerful the Soviet Union was in their economic and political and technological capabilities. It is fascinating to me that in 8 years that we have figured out everything we have been saying for the last 15 years is true.

Dr. Hewett.

Dr. HEWETT. Senator Biden, I agree with you that it would take a fundamental transformation of that system to turn it into a country capable of competing with other world class industrial powers, and that will take decades, not years but decades.

Indeed, I think the most optimistic assessment that you can have about the Soviet economy is that in the early part of the next century they would be on the right path but moving very slowly.

Our image of the Soviet Union is an oddly contradictory one. When you are in a hearing, say, of the Senate Armed Services Committee, the Soviet Union is 10 feet tall. When you are in a hearing here, sometimes it is 10 feet tall, sometimes it is a midget. It depends on what purpose is to be served.

For me, I think one of the interesting things is, to contrast Dr. Shelton and Mr. Robinson, people who are associated with generally conservative positions have a much different view of the Soviet financial situation.

Dr. Shelton has depicted them, if I recall, in her statement and her book, as desperate for funds from the rest of the world. Mr. Robinson thinks they are so flush that they can afford the redevelopment of Eastern Europe.

My own view is that the Soviet Union is in a decent financial position internationally but is also very conservative about how it is going to use that borrowing capacity in the future. That is one of its strongest points. On the other hand, the economy itself is very weak and will require the transformation that you were talking about.

Senator BIDEN. Doctor, it seems like everybody can agree that we want to promote a strategy of infusion of Western values into the Soviet empire, but what broad economic purpose should we propose or what broad economic strategy should we propose? Do we do it by withholding any economic relationship with the Soviet Union or by promoting greater introduction of economic relationships such as joint ventures?

Dr. HEWETT. Senator Biden, I would like to see us get out of the way and allow the basic economics of the relationship to assert themselves. That is why I support a suspension of Jackson-Vanik in order to allow most-favored-nation treatment to be given to the Soviets and to show them their problem really is in developing exportable goods.

I think it would be a great mistake for us to shift to a posture of trying to help economic reform either through finance or other measures. It would be quite sufficient, even from the Soviet point of view, if we would simply get out of the way and allow the economics of the situation to assert itself.

The most powerful effect we can have on the Soviet Union is through our ideas about how you organize an economy. By our mere existence we exert a tremendous impact on them. Beyond that, doing a little bit on the margin here and there is an interesting idea. But it does not have much effect, at least from the governmental point of view.

Senator BIDEN. My time is up. I have a couple of questions for Jerry Hough, but I will withhold.

The CHAIRMAN. Well, the next round will be wide open, so why not go ahead. Otherwise, I was going to go on to the next panel.

Senator BIDEN. All right. Thank you.

Let me ask just one question of you, Professor. I do not know who said it earlier, but assuming tomorrow we heard on the news that Mr. Gorbachev was gravely ill and could no longer for health reasons stay in power. Can you envision any reasonable prospect of anyone being able to move back at least in the near term to the

Brezhnev era; and if there were such an attempt, what kind of impact do you think this would have within the Soviet Union?

Dr. HOUGH. Well, there are always going to be zigzags in anybody's policy, and I certainly cannot imagine tightening up, let us say, on Estonian demonstrations or something in the electoral sphere.

The basic fact that I will come back to is what would be the attitude of the United States if we were terribly lagging, lagging even behind countries like South Korea, and Mexico was surging ahead the way it has been and it had a billion people. Would we be concerned about our defense in the future? I simply say we are going to go back to stagnation.

So, I think what you have in the Soviet Union is an enormous impulse to enter the European defense community essentially over a 10-, 20-, 30-year period in a way that I think in 10 years would—I mean, in 1939 who would have imagined that there was no conceivable possibility in the second half of the 20th century that Britain, France, and Germany would not go to war. I think in 10 or 15 years, the notion of war between the Russians and the other Europeans will be just as unlikely.

So, I think the problem often of what we are talking about in Eastern Europe is the thought that the border of Europe is going to end at the Polish-Soviet border. The Soviets are not going to let that happen. It is essentially not in our interest, and we are talking about a much broader process.

So, if perestroika is failing, then Gorbachev will move to the left. If Gorbachev fails, whoever comes after him will move to the left. Again, policy can jigjag over 6 months or other periods.

Senator BIDEN. Thank you very much.

The CHAIRMAN. Thank you very much indeed, gentlemen.

Mr. ROBINSON. Mr. Chairman, would it be possible to just in a sentence or two clarify the comment that Dr. Hewett just made concerning the perceived disparities?

The CHAIRMAN. In a sentence or two.

Mr. ROBINSON. Yes, very quickly.

There is no real disparity in Dr. Shelton's and my view of the financial situation within the U.S.S.R. I share her view almost entirely. The Soviet Union does, however, have creditworthiness. I was not talking about going out and buying Rolls Royce dealerships or other such luxuries.

The CHAIRMAN. That is four sentences already.

Mr. ROBINSON. OK, thank you.

The CHAIRMAN. Thank you very much indeed.

We now move to our second panel: Mr. Larry Brady, former Assistant Secretary of Commerce for Trade Administration and senior vice president, Hill and Knowlton; Mr. John Kiser, president of Kiser Research; and Mr. Alan Sherr, director of the Project on Soviet Foreign Economic Policy and International Security from Brown University of Rhode Island.

My understanding is that you will limit yourself, as you have already been instructed, to 8 minutes. Your statements will be included in full in the record.

Mr. Brady, would you start out?

STATEMENT OF LARRY BRADY, FORMER ASSISTANT SECRETARY OF COMMERCE FOR TRADE ADMINISTRATION, SENIOR VICE PRESIDENT, HILL AND KNOWLTON, WASHINGTON, DC

Mr. BRADY. Thank you, Mr. Chairman. Mr. Chairman, I want to thank you and the members of the committee for holding these hearings. I think they will be significant in shaping policy for the next decade in what I believe is a very critical juncture for the United States and the NATO alliance.

I am going to read the first 3 or 4 pages of my statement. Additionally, I have a few articles which I wrote last year on this general subject, and I would ask that they be included in the record, Mr. Chairman, along with my full statement.

The CHAIRMAN. Very well.

Mr. BRADY. Mr. Chairman, I would like my remarks to be viewed as the observations of someone who spent years in Government dealing with United States-U.S.S.R. policy in both its formulation and execution.

The role of economics, trade, and finance in the formulation and execution of our foreign policy is the core issue that I would like to talk about this morning. I have considered this role firsthand since 1971 when I joined the staff assembled at the White House by Peter G. Peterson, who had been appointed by President Nixon as a First Assistant to the President for International Economic Affairs.

President Nixon had become convinced that international economic policy needed a separate and stronger focus as an element of our foreign policy. I recall vividly the ongoing disputes and tension between Henry Kissinger, the National Security Advisor who tended to relegate the economics to a lesser status, and Pete Peterson and later Peter Flanagan, Directors of the Council on International Economic Policy, both of whom sought to have greater weight accorded the economic dimension of foreign policy.

The situation confronting us today in dealing with the Soviet world contains the same conflicts between the political and strategic elements and the economics, and that I think will come out more and more as we look at the discussion this morning.

However, Mr. Chairman, the magnitude of the problems today are significantly greater. I firmly believe the core issue of the United States and NATO policy toward the U.S.S.R. and Eastern Europe for the next decade is almost totally one of how to manage our economic relations. I fundamentally disagree with Mr. Hewett over adopting a neutral stance toward the economic relationship with the Soviet Union, because adopting that view, Mr. Chairman, would eventually mean the disintegration and dissolution of the Western alliance.

The offensive launched by Secretary General Gorbachev is an economic offensive. The political and strategic issues discussed between the United States and the U.S.S.R. are but the required Soviet giveaways, in my view, to make certain that they get the needed financial, economic, and technological assistance and know-how desperately needed to save the system.

I also believe that time is running out for the United States. As leader of the Western alliance, we appear paralyzed at the Gorba-

chev initiatives. What is more disconcerting is the apparent unwillingness or inability of the executive branch to factor in our economic power as an element of our overall foreign policy.

One thing is certain, Mr. Chairman. At this point in time the United States should have a policy that is clear, constant, and consistent vis-a-vis perestroika and the economic offensive launched by Gorbachev.

We should also be developing that policy with the alliance, coordinating and meshing the economic, the political, and the strategic.

Mr. Chairman, let there be no mistake. Passivity, timidity, the inability or the unwillingness to come to grips with the Soviet offensive is an abdication of leadership by the United States which will lead eventually, as I said a second ago, to the disintegration of the Atlantic alliance. Taking no action is itself a policy decision fraught with unforeseen consequences. It is a policy of self-isolation.

I believe that not since the late 1940's, 1947, when we assumed the mantle of leadership for the free world from Britain has the United States been faced with as serious a foreign policy crisis.

At the present the United States is in a reactive mode, attempting to blunt political and strategic initiatives from a broad party spectrum in Germany. This, coupled with a strong desire of German industry to vastly expand trade with the U.S.S.R., raises fundamental questions about NATO's reason for being and Germany's participation.

The events in Europe are particularly disturbing in view of Gorbachev's own view of where Europe belongs. There again, Mr. Chairman, I fundamentally disagree with some of the members of the earlier panel.

When Mr. Gorbachev speaks of a common European house including the Soviet Union, our policymakers are apparently unaware of the import of these words. We desperately need a historical, geopolitical, and cultural perspective to our policy. This is not the first time that Russia or the Soviet Union has turned to the West, particularly to Germany, for help when in need. In many respects, Gorbachev can be characterized as more Leninist than any leader since Stalin. Lenin's new economic policy, the NEP, was intended to use the assets of the West to make those dramatic and immediate economic advances which were required to satisfy the population immediately after the Bolshevik revolution.

Even before the Communists took power, however, Russian czars like Peter the Great and later the Empress Catherine the Great time and again looked to the West for assistance with industrial modernization. I believe someone has to make the point now that these periods of courting the West did not result in Russia becoming a Western pluralistic nation driven by a market economy with a democratic form of government guaranteeing individual liberty and human rights.

Mr. Chairman, geopoliticians in the earlier part of the century, McKinder, Spickman, and Mahan have all written extensively of the relationship of the Soviet Union or Russia to Western Europe, specifically to Germany, and cautioned against a Europe or a Germany allied to Russia. At that point the economic power block cre-

ated by them would force the United States to retrench to the Western hemisphere and become even more impotent in attempting to structure a world aimed at preserving its vital national interest.

Mr. Chairman, when Mr. Gorbachev talks about the common European house, he is enunciating the czarist and Leninist view of a Russia allied with an economically and technologically advanced Western Europe. It is impossible, Mr. Chairman, in my view, to look at what our policy should be vis-a-vis the Soviet Union and the Eastern bloc which is really the task that the executive branch and in a certain way you here are doing now without looking at these historical geopolitical aspects of Russia and not only the Soviet Union.

For a brief moment I would like to deal with some of the more specific aspects of what a policy should be and what I believe the real needs are as the administration and the Congress look at the next decade.

I recently came across the trilateral commission discussion monograph prepared by Henry Kissinger and former Prime Minister Nakasone and former President Giscard d'Estaing. The report makes some very solid points about the need for a policy. What is disturbing, however, is that they also denigrate the role of economics in the relationship. They do not believe that there should be linkage in that we should use our financial help, our technological superiority as a way to bring about the changes which we all hope will take place in the Soviet Union.

Mr. Chairman, it seems to me that the business community needs predictability. It needs to know what the policy of this government is going to be. A laissez faire policy will not satisfy the needs of the business community.

It also seems to me, Mr. Chairman, that our policy as we formulate it and execute it must take account of some very fundamental elements, including the fact that changes have to happen in the Soviet Union regarding wages, prices, and decentralization before far reaching changes are possible.

Thank you, sir.

[The prepared statement and addenda of Mr. Brady follow:]

PREPARED STATEMENT OF LAWRENCE J. BRADY.

Mr. Chairman, it is a great honor and privilege to address this Committee. I thank you for your invitation.

I also want to take this opportunity to commend you, Mr. Chairman, Senator Helms and the Committee for convening these hearings. I sincerely believe they will be significant in shaping policy for the next decade in what is a critical juncture for the US and the Nato Alliance.

Mr. Chairman, I would like my remarks to be viewed as the observations of one who has spent many years in government dealing with US/USSR policy both in its formulation and execution.

Mr. Chairman, the role of economics, trade and finance in the formulation and execution of our foreign policy is the core issue I would like to discuss this morning. I have considered this role first-hand since 1971 when I joined the staff assembled at the White House by Peter C. Peterson who had been appointed by President Nixon as the first Assistant to the President for International Economic Affairs. President Nixon had become convinced that international economic policy needed a separate and stronger focus as a element of our foreign policy. I recall vividly the ongoing disputes and tension between Henry Kissinger, National Security Council Advisor who tended to relegate the economics to a lesser status, and Peter Peterson and later Peter Flanigan, Directors of the Council on International Economic Policy both of whom sought to have greater weight accorded to the economic dimension in foreign policy.

The situation confronting us today in dealing with the Soviet world, contains the same conflicts between the political and strategic elements and the economic. But, the magnitude of the problems are significantly greater.

I firmly believe the core issue of U.S. and NATO policy toward the USSR and Eastern Europe for the next decade is almost totally one of how to manage our economic relations. The offensive launched by General Secretary Gorbachev is an economic offensive. The political and strategic issues discussed between the U.S. and the USSR are but the required Soviet "giveaways" to the West to assure that the USSR can acquire the economic, financial, and technological assistance and know-how desperately needed to save the Soviet system.

Time is running out for the United States. As leader of the Western alliance, we appear paralyzed at the Gorbachev initiatives. What is more disconcerting is the apparent unwillingness or inability of the Executive Branch to factor in our economic power as an element of our overall foreign policy.

One thing is certain, Mr. Chairman, at this point in time the United States should have a policy that is clear, constant and consistent vis-a-vis Perestroika and the economic offensive launched by Gorbachev. We should be developing a coordinated policy with the alliance, meshing the economic with the political and strategic.

Let there be no mistake, passivity, timidity, the inability or unwillingness to come to grips with the Soviet offensive is an

abdication of leadership by the United States which will lead eventually to the disentigration of the Atlantic Alliance. Taking no action is itself a policy decision fraught with unforeseen consequences.

Not since the late nineteen forties when we assumed the mantle of leadership of the free world from Britain, has the U.S. been faced with as serious a foreign policy crisis. At the present, the US is in a reactive mode attempting to blunt political and strategic initiatives from a broad party spectrum in Germany. This coupled with the strong desire of German industrialists to vastly expand trade with the USSR raises fundamental questions about NATO's reason for being and Germany's participation. Mr. Chairman, I am reminded of a conversation I had as Assistant Secretary in the early 1980's when one of my German counterparts told me their objective was to industrailize the USSR because they were natural trading partners. The USSR had all the resources and Germany had technology.

The events in Europe are particularly disturbing in view of Gorbachev's own view of where Europe belongs. When Mr. Gorbachev speaks of a "common European house," including the Soviet Union, our policy makers are apparently unaware of the import of these words. We desperately need a historical and cultural perspective to our policy. This is not the first time that Russia or the Soviet Union has turned to the west, particularly Germany, for help when in need. In many respects, Gorbachev can be characterized as more Leninist than any leader since the Stalin period. Lenin's "new economic policy," the NEP, was intended to use the assets of the west to make those dramatic and immediate economic advances which were required to satisfy

the population immediately after the Bolshevik revolution. But even before the communist took power, Russian Czars like Peter the Great and Catherine the Great, time and again looked to the west for assistance with industrial modernization. We should be mindful that these periods of "courting" the West did not result in Russia becoming a "western" pluralistic nation driven by a market economy with a democratic form of government guaranteing individual liberty and basic human rights.

De Tocqueville, the great political writer of the mid nineteenth century, foresaw this century with two superpowers pitted against one another namely, Russia and the United States. Geo-politicians in the earlier part of this century, including McKinder, Spickman and Admiral Mahan, have all written extensively of the relationship of the Soviet Union or Russia to western Europe, specifically to Germany, and cautioned against a Europe or a Germany allied to Russia. At that point the economic power bloc created would force the US to retrench to the western hemisphere and become more impotent in attempting to a structure a world aimed at preserving its vital national interests.

When Gorbachev talks of a "common European house," he is enunciating the Czarist and Leninist view of a Russia allied with an economically and technologically advanced Western Europe.

Mr. Chairman, I recently read a discussion draft of a report prepared for the Trilateral Commission by Henry Kissinger, former Prime Minister Nakasone, and former President Giscard d'Estaing. That report repeatedly stresses the need to provide a clear agenda and strategy to deal with the Soviet Union. It states that Western passivity, or worse, a posture of delayed or uncoordinated reaction to Soviet initiatives would permit the Kremlin to define the East-West agenda and thereby serve

primarily Soviet interests. The report states that the West can do no less than develop its own coherent policy and security agenda. What is disturbing about this report however, is the denegration of the economic in favor of the strategic and security aspects in the relationship between East and West. The report does discuss East West economics, but almost as an aside and not as a core element of our foreign policy.

Mr. Chairman, if we are to achieve the peaceful change that we all hope for in the Soviet Union, it will be primarily through the the use of our economic power that we will reach those ends. That economic power can be used both as a carrot and a stick i.e. in a negative way by depriving the USSR access to our market, by controling our high technology products, our financial and our technological help as we did at the time of the pipeline sanctions. But our economic power can also be used in a positive way by granting credits, financial help and access to our market.

One thing is clear however, and that is, that the economic factors of the foreign policy relationship are by far the most important ingredient as we try to deal with the Soviet Union over the next few years. What we as a nation and as an alliance must not do is to relegate the political-economic issues to secondary importance as suggested by those who prefer to think of trade for trades sake or only think of the US/USSR in strategic terms. There must be political direction to the trade, financial and technological flows to the Soviet Union and Eastern Europe.

To decouple US/Soviet trade and economics from other aspects of the relationship is wrong not only because we would be depriving ourselves of the use of a large segment of our instrinsic power; but also because when the economic relationship has been without political direction in the past it has lead to fundamental

problems for the US business community. In the final analysis the business community is badly served when the US Government refuses to set out clear, consistent guidelines for its policy to the Soviet Union.

Mr. Chairman, an integral part of our East-West policy concerns high technology exports -- the Cocom system. In 1979, in testimony to the the House Armed Services Committee, I said the export control system was a shambles. Mr. Chairman today, one cannot call it a shambles because we have three large bureaucracies, the State and Commerce Departments, and the Department of Defense all addressing these issues. On paper they are all working beautifully, and the case load processing numbers look good. But they are paper shuffling operations. Beneath the surface there are real problems with the Cocom system. There is intense rivalry between the three departments which badly serves our policy as well as our business community. These problems will be magnified to a much greater extent as soon as a no exceptions policy in Cocom is lifted, and departments have to review Soviet licenses for the USSR on a case-by-case basis.

The U.S. export control system and the government's organization to deal with these issues could place the business community at a disadvantage in meeting international competition. In 1979 I recommended the creation of an Office Strategic Trade with a director appointed by the President and confirmed by the Senate. His decisions could be appealed to the President by the respective Cabinet Secretaries. I believe that recommendation is still exceedingly viable today. It would mitigate interagency infighting by giving a dominant voice to the direction of overall export control policy and machinery, and allow a much needed complete review of the list of items that is controlled and how

that list as well as the system should be structured for the next decade in view of the technological advances taking place.

The greatest threat to the Cocom system which the Reagan administration put so much effort into improving is coming from our European allies and Japan who are threatening wholesale disregard of the system because of what they perceive to be too stringent a policy by the United States. Mr. Chairman, as Deputy Director, Acting Director and Assistant Secretary, I spent nearly ten years administering the system at the Commerce Department. Clearly, we need a consensus among all member countries if the system is to be respected and adhered to. But time and again, I have seen our alliance partners become disenchanted and frustrated with the export control system because they viewed US actions as self-serving and commercially motivated. In the 1970's they often complained of a lack of US leadership. Without strong leadership by the United States, without a constant and consistent policy, our European and Japanese colleagues tend to believe that we have lost interest and proceed to shape their own policy. In the very near future, we need a restatement from this administration of the importance of Cocom and an objective review of what is controlled to the USSR. Mr. Chairman, american industry is currently looking to the Soviet Union, as it did in the early 1970's, as a vast unexplored market. Clearly, it is unfair of the government to place U.S. industry at a disadvantage vis-a-vis its European and Japanese competitors. They need predictibility from this government.

The American business community must also recognize that there are major overwhelming obstacles to be removed by the Soviet Union if there can be any hope of real economic relationships with the market economies of the West. The Soviet Union faces

three challenges as internal change continues: the ability to move decisions about the output of goods and services away from central planning: the willingness of bureaucrats and working citizens to assume responsibility for profits and losses: and the ability of the government to create market mechanisms based on real money and real wages. Gorbachev's ability to deal with these challenges will determine his ability to really change the Soviet economy. Anything short of succeeding in these areas is window dressing and "playing at the margins."

Reflecting repeated urgings in Europe to create a "Marshall Plan" for the USSR, the Trilateral Commission report makes recommendations about western participation in the Soviet market and suggests observer status for the Soviet Union in International organizations such as the IMF the World Bank and the GATT. They recommend substantially increased economic contacts including joint ventures and financial support for enterprises in the Soviet Union.

Mr. Chairman, it seems to me that before we embark on a policy designed to support the Soviet economy certain very simple conditions should be met. This is at the crux of the creative and positive use of our economic power.

First the Soviets must show that they have clearly and irreversibly embarked on a program to decentralize their economy bring about true ruble convertability, accross-the-board price reform--real money and real wages, i.e., meet the challenges I described above.

Secondly, as long as the Soviets continue to maintain their empire, funded by Western funds, supporting forces inimicable to peace and security on this continent and elsewhere contrary to

the vital interest of the United States, including billions of dollars in support for Cuba and Nicaragua alone, it would seem insane to embark on a massive support effort for the Soviet economy.

Thirdly, as long as Gorbachev continues to suport and protect governments like those in Czechoslovakia and East Germany which won't even permit the amount of glasnost and perestoika, that he himself has introduced in the Soviet Union, it would appear to be premature to discuss wholesale economic efforts.

Fourth, even the Trilateral Commission implicitly recognizes a competition for the world's available financial resources between the struggling democracies of Latin America and Africa, particularly Mexico, Brazil and Venezuela and the Soviet Union itself. The Report cautions about creating another world debt situation such as Western banks have created with the developing countries. The US goverment and the NATO Alliance should be clear about its priorities.

Fifth, notwithstanding, all of the retoric, and all that is written about the changes introduced in the Soviet Union, we have yet to see a realocation of resources away from the military to the civilian sector. As a matter of fact, a recent report by the US government suggested that precisely the opposite has taken place, and that more resources in the last year went to defense than before. Certainly until that reallocation takes place it would be absurd for the United States to even think about signficant economic support. Western economic help may actally delay that reallocation and prop up the bankrupt Soviet system.

All of these suggestions have as their basis the willingness of the US to use its economic leverage to encourage Soviet domestic and foreign policy performance.

Mr. Chairman, recently I read a biography of Will Clayton by his daughter Ellen Garwood. Clayton is the man who is generally recognized as being the author of the Marshal Plan. At the time he was Under Secretary of State for Economic Affairs. The biography dwells on how Clayton conceived the Marshall Plan, how it would work and the conditions that were attached to U.S. aid. The basic assumptions of the Plan were that European democracies as market economies would strengthen the international trading system to the benefit of the free world's defense. Clayton's entire thrust in conceiving the Marshall Plan was to counteract the Soviet Union in Western Europe which was as he said, "boring from within" and attempting to undermine governments including those of Greece and Turkey. Accurately, he felt that the independence of these governments was critical to the vital interest of the United States. Interestingly, the Soviet Union was invited to become a participant but it refused because it would not subject itself to the constant ongoing review of the Soviet system to make certain it became a "market economy." As we hear the cries coming from Europe for a Western financed economic recovery plan for the Soviet Union, we should keep in mind the context and the conditions attached to the original Marshall Plan. The fundamental conditions between Western Europe in the late 1940's and USSR of today are simply not comparable. By no stretch of the imagination can the USSR be considered on the verge of a truly democratic transformation of the political system. Further, the USSR would not agree today to conditions similar to those attached to European aid in the late 1940's. Looking at this issue by revisiting the original objectives and assumptions of the Marshal Plan underscore the irrationality of a similar approach for the USSR.

Thank you Mr. Chairman and members of the Committee.

#1

The Union Leader Manchester, N.H.

40

The Editorial Page

THURSDAY, FEBRUARY 4, 1988

Gorbachev's Real Motives

Lawrence J. Brady, former assistant secretary for Trade Administration, U.S. Department of Commerce, wrote a three-part series exclusively for the Loeb newspapers with an eye toward asking Presidential candidates for their positions on the issue of economic aid to the Soviets.

‡ ‡ ‡

By LAWRENCE J. BRADY

SINCE SECRETARY Gorbachev's recent visit to Washington and the signing of the INF Treaty, the United States and Washington politicians and bureaucrats especially, have been overtaken with the euphoria of what some refer to as a new period in U.S.-Soviet relations, a second period of detente. This euphoria is based much more on Gorbachev's success as a media star than on hard analysis and understanding of what the Soviets' motives are. What is needed is some down to earth thinking about what our response should be.

We hear and read a great deal about Glasnost, Gorbachev's policy of bringing democracy and openess to Soviet society, and Perestroika, the restructuring of the Soviet economy. Since any loosening up on the Stalinist command control economy is regarded by us as something positive, we tend to look favorably both upon Gorbachev's economic moves as well as the very small steps he has taken to loosen the authoritarian regime's impact on Soviet citizens.

AND BECAUSE GORBACHEV is a different kind of Soviet leader with a charming and attractive wife who dresses in Paris-designer clothes, many Americans have a comfortable feeling about this man and his policies. Some policymakers in Washington proclaim "we must help this man accomplish what he needs to accomplish so that we can establish peace between our two countries." Our experience with the last detente period would strongly suggest that before the United States and the West embark on Detente II, we should be very clear as to what the Soviets want from the West, why they want it, and we should know in our own minds what we want in return.

Some of us have suggested that disarmament negotiations, like the INF negotiations, are of secondary importance to the Soviets. Gorbachev knows, however, that the United States and the West particularly the ultra-liberals in Western Europe and the nuclear freeze advocates in the United States, look upon disarmament as a be all and end all — a goal in and of itself. He knows that by using disarmament rhetoric he can undermine public support for the Reagan policies of peace through strength that were so successful in rebuilding the stature and role of the United States. Also, by dealing with the disarmamemt issue, Gorbachev strikes at the President's Strategic Defense Initiative. The latter is an initiative which the Russians cannot allow to continue because of the possibility that the West could make a qualitative jump in its ability to find protection for Soviet missiles. He is also aware that Soviet technology cannot match ours in this area. But notwithstanding these objectives, there is a much more fundamental one which is driving Gorbachev.

THE SOVIET ECONOMY is falling further and further behind that of the West and other third world countries in its ability to create new jobs, in productivity, and basically in the ability to feed, house, and care for its citizens. To put it bluntly, the Soviet economy, as well as those of its allies in Eastern Europe, is on the ropes. The Soviet Bloc governments desperately need help from the West if they are to survive. Getting that help is Gorbachev's primary objective in his dealing with the U.S.

Consider what the Kremlin's strategists, including Gorbachev, must have felt when they realized that the less developed countries of the third world are beginning to overtake the Soviet Union in their ability to produce for export markets. Countries like Singapore, Hong Kong, Taiwan, South Korea are overtaking the U.S.S.R. and Eastern Europe in their capacity to manufacture goods for their own people and for the world economy. Those countries are manufacturing products that we use and have in our own homes — VCRs, TV sets, automobiles. Those free market economies have promise for the future. There is an air of optimism about their ability to compete strongly in the international market place. There is, however, no such optimism or promise for any of the countries of Eastern Europe. Poland, Hungary, East Germany, Romania, Yugoslovia, and the U.S.S.R. are living an economic nightmare. Clearly the Communist command economies have not worked and the leadership in the Kremlin finally is beginning to recognize this.

Consider the reaction recently in Moscow, when Boris Yeltsin, former mayor and party chief of Moscow who criticized the "go slow" nature of Gorbachev's programs (Perestroika) was removed. The people of Moscow became deeply concerned because they realize Yeltsin called the shots as he saw them and was correct in saying that the changes which are being advocated are basically few and will be of no substantial benefit to the rank and file of the population. Workers are being more and more successful in Eastern Europe forcing Communist governments to heed their demands.

IN YUGOSLAVIA FOR instance, they forced wage increases. In Poland, the government suffered a humiliating defeat when the Polish people voted down a set of reforms to restructure the economy. Consider the riots in the Western part of the Soviet Union as Muslims demand and insist upon their independence and refuse to bend to the power of state communism.

JUST RECENTLY, a report by the Commission on Itegrated Long-Term Strategy, concluded that the Soviet Union's stagnation, as well as its attempts to reverse it, are significant unknown factors which U.S. policymakers have to consider as the U.S. looks at the next 10 to 25 years. This report predicts that the Soviet Union will decline to a poor fourth in national economic power, coming after the United States, Communist China and Japan. It predicts that the Soviet Union will grow very little economically over the next two decades. This prediction acknowledges that some of Gorbachev's economic restructuring probably will have some positive effect.

Pg. 2 Commentary- Union Leader - Feb. 4, 1988

But the Communist Central planners who have become a new Soviet elite, never to be outdone, have found a way to solve their problem and also create a massive problem for the United States and the NATO alliance. The game plan for Gorbachev is to compensate for the bankruptcy of Communist central planning by harnassing the benefits of the Western economies to the Soviet and East European economies. The Soviets will hold the "threat of war" and the threat of continuing to undermine those interests that are vital to the security of the West areas like in the Middle East, Central America, South Africa, as hostage to get Western technology, trade, economic, and financial resources.

This time, the Soviets want not only the high-technology which we gave them and which they stole in the 1960s and 1970s which was the basis of the biggest and most extensive military build-up in peace-time history. This time they want design, manufacturing and industrial processes, they want joint-ventures with American companies, and they want the financing and loans to make it all possible. The Soviets want the know-how, the ability to take the theoretical scientific facts and theories and apply them toward an industrial process. That is what the Secretary of Commerce says we must help give the Soviets because it is important in fostering a greater degree of trust between our two countries.

‡ ‡ ‡

—To be continued.

II d

Commentary

• AUTOMOTIVE • EMPLOYMENT CLASSIFIED 1 • INSTRUCTIONS • PERSONALS

Soviet Empire Funded by the Western Banks

Lawrence J. Brady, former assistant secretary for Trade Administration, U.S. Department of Commerce, wrote a three-part series exclusively for the Loeb newspapers with an eye toward asking Presidential candidates for their positions on the issue of economic aid to the Soviets. This is the second article of that series.

‡ ‡ ‡

By LAWRENCE J. BRADY

I *HAVE BEEN* asked many times how the Soviets can maintain an empire and build a massive military establishment with an economy that is failing. The answer lies in their command economy by which they direct whatever resources are required to the military, and in the technological, trade and financial help they get from the West. There is no longer any question that the KGB has an on-going program to steal technology from the West. This coupled with legal purchases is a corner stone of their technological development efforts.

But Soviet analysts are only now beginning to deal with the fundamental issue that our politicians don't want to deal with, namely how a country that has hard currency earnings in 1986 of $29 billion - the equivalent of a little over one quarter of the sales of General Motors — can maintain its empire. This bottom line issue has totally escaped serious attention for the last 50 years.

Up to 90 percent of the Soviet hard currency income is derived from just four items — the sale of oil, gas, arms, and gold. The Soviets are the biggest arms merchants in the world.

Clearly, their hard currency earnings doesn't begin to give the Soviets the resources to maintain their empire. Western banks have filled the financial gap. The Treasury Department estimates in 1986 the Soviet bloc received about $2 billion a month in loans from the West. According to the Organization for Economic Cooperation and Development, the most respected international agency accessing economic developments and projecting economic trends, the Soviet bloc now has an estimated indebtedness of $127 billion to the Western banks.

It is interesting that if we assume that the hard currency earnings of $29 billion were used to purchase imports from the West, and to pay interest on their debt, then the Soviets had to rely on Western loans to support their commitments to Nicaragua, Vietnam, Cambodia, Libya, Syria and South Africa Communists, among others.

The naked truth is that Western financial institutions are loaning the Soviets the money by which they maintain their empire. Our own banks on the one hand make loans to the Soviets, while our taxpayers have to support growing budget deficits to upgrade the military posture of the United States to counter the adventurism which is funded by those Western banks.

Consider the absurdity of U.S. policy in Central America while President Reagan insists on getting additional tens of millions of dollars for the Contra fighters, the Soviet Communists are able to borrow tens of billions of dollars from Western banks which help finance the Sandinistas.

The naked truth is that Western financial institutions are loaning the Soviets the money by which they maintain their empire.

What is worse, is that if an American taxpayer goes into a neighborhood bank to get a loan, he will have to pay the going rate. And, generally, except for small unsecured credit line, he will have to say, what he wants the loan for. Not so with the Soviet Union or Eastern Europeans. About 80 percent of the total amount of hard currency loaned to the Soviet bloc last year, was in the form of untied loans namely pure cash for no specific trade transaction or project. It is as if the bank wrote you a check and you could use that check for any particular purpose you wanted.

Moreover, the terms of those loans were extremely generous in every respect. Most of them were made at about 7⅛ percent interest, a fraction of the rates for the American taxpayer.

As Gorbachev looks at his economy and his empire's future he admits his Perestroika reforms can't be successful without further massive amounts of Western aid.

"Perestroika, as Anthony Harrigan, president of the Business and Industrial Council said recently, is simply an invention by the Soviets to get as much of our dollars as they can while they also gain access to our technology in order to modernize their military and industrial complex."

417

Pg. 2 - Commentary - Union Leader - Feb. 6,

John P. Hardt, an expert on U.S.-U.S.S.R. economic relations who works for the Library of Congress' Congressional Research Service, a bipartisan staff supporting the entire Congress said recently "He, Gorbachev, can't modernize effectively without the economic support of the West and the U.S. is the linch-pin."

One of Commerce Secretary William Verity's long-time intimate colleagues on East-West trade, Mr. James Giffin recently on the "Today Show" in responding to a question on whether we want to make the Soviet Union an economic superpower said, "I think we do."

The bait has been set by Mr. Gorbachev. American and Western multinationalists and industrialists are beginning to go down the road to what may well be an experience more bitter than the road they travelled under the first period of detente.

Is the U.S. and its allies prepared to follow the Verity lead and make the U.S.S.R. an economic superpower as Giffin said we should? A word of caution is in order on two accounts.

First, we should understand that joint-ventures are at the top of Gorbachev's wish list. This allows the Soviets to use Western managers to build and run the Soviet plants. The enterprises are co-financed by the West and they use Western technology. The Soviets perceive these companies to be a permanent source of dollars earned through sales to the West. What the Soviets have said repeatedly is that these joint ventures will allow them to export products manufactured in the U.S.S.R. to the U.S. and Western markets. No less an expert than Edward Hewett, a Brookings Institute scholar has said that Soviet joint ventures are designed mainly for export of goods to the West.

Our businessmen should realize they may be building plants in the U.S.S.R. which will compete with products manufactured in the U.S.

But we must also understand that the U.S. will find it difficult to absorb any more imports from anywhere. With a U.S. trade deficit of over $150 billion it is optimistic in the extreme to believe that the Soviets could be competitive in U.S. markets, which is their goal.

There is a second major point we should remember. Is it in the interest of the United States, and its allies, to make the Soviet Union an economic superpower without any assurance of a change in the foreign policy of the Soviet Union or without any assurance that the Soviets will drastically change their internal economic structure as well as their repressive totalitarian regime which continues to snuff out the human rights of Jews and all other dissidents who dare take on the system?

‡ ‡ ‡

—To be continued.

Behind The Headlines COMMENTARY ON OUR TIMES

Is There a Secret Codicil in INF Treaty?

Lawrence J. Brady, former assistant secretary for Trade Administration, U.S. Department of Commerce, wrote a three-part series exclusively for the Loeb newspapers with an eye toward asking Presidential candidates for their positions on the issue of economic aid to the Soviets. This is the third and final article of that series.

* * *

By LAWRENCE J. BRADY

WASHINGTON observers are speculating that the hearings on the INF Treaty may become entangled in the question of whether there is a secret written or verbal codicil to the Treaty in which the Reagan Administration, has promised a Western Marshall Plan to the Soviets to bail out the Soviet and East European economies. This Marshall Plan, modeled after what the United States did to the war-devastated economies of Western Europe after World War II includes a number of major elements. Already there is a growing belief that Secretary of Commerce Verity is working with Western industrialists on 11 major joint-venture projects that these industrialists will sign with the Soviet Union in the machine building food stuffs, light industry, food processing, chemicals, biotechnology, agriculture and general infra-structure areas.

Congressional insiders believe that the State Department may have made promises to the Soviet Union that the United States will support Soviet entry into the three international economic organizations that form the basis of the Western international economic system.

THE INTERNATIONAL Monetary Fund, the World Bank and the GATT are the vehicles created after the end of World War II which have guided the economic relations of Western economies. The IMF is the organization that is being used today to attempt to prevent a breakdown of the international economic system by defaulting third world countries. It is generally agreed that should the Soviets join these organizations, their ability to borrow in the West would be substantially enhanced. Lawrence J. Brainard, senior vice president of the Banker's Trust Company, in a report to the Joint Economic Committee of the Congress, is quoted as saying, "Membership in GATT and the World Bank, would improve the Soviet Union's ability to tap private credit markets."

Although for the moment the State Department's position is opposed to membership, analysts are skeptical because Deputy Secretary of State Whitehead early in 1987, responded to a congressional question by saying that the United States was in favor of Soviet Union membership. Barber Conable, head of the World Bank, also indicated that he would support the Soviet Union membership in those institutions. It was only after a group of congressmen became irate at the thought of the Soviets joining the very organizations that undergird the free worlds international economic structure, that the State Department changed its tune. However, this was before the INF was signed and Gorbachev's visit to the United States.

The new Marshall Plan would also include removing the Jackson-Vanik amendment, which prohibits granting most favored nation tariff treatment to the Soviet Union unless they agree to maintain Jewish immigration at a certain level. Under this scenario the U.S. Export Import Bank would also start granting government loans at discounted rates and guarantee private bank loans to the Soviets.

ALREADY DEPUTY Secretary of State John Whitehead is planning a trip to Hungary to negotiate allowing Poland, Bulgaria, Romania, Czechoslovakia and Hungary to participate in the U.S. Overseas Private Investment Corp. This would let American businesses in those countries buy insurance against political risks such as expropriation of those American investments. It would also provide for U.S. government to guarantee loans up to $50 million to U.S. businesses investing in Warsaw Pact nations.

The troubling concern about the strong push by the Soviets and the East Europeans to harness their economies to the expanding economies of the West is that it will preclude and preempt the very change that many of our industrialists naively believe this harnessing would bring about.

RELYING ON THE EAST for technology, economic and financial help, is by far a less-risky path for Gorbachev and his Kremlin to follow than bringing about real reforms within the Soviet Union. Gorbachev is in a quandry. On the other hand, he has Soviet students and consumers wanting a better standard of living and more consumer goods. On the other hand the Yeltsin affairs has shown that loosening up the totalitarian regime will lead to greater demands by Soviet students and consumers for more political and economic freedom. Gorbachev learned the hard way that it is impossible to get "a little bit pregnant." He decided to step back. By obtaining the technology, economic and financial help from the West, Gorbachev will be excused from having to deliver on "real" reforms both in the political and economic areas.

We are entitled to answers. George Bush, Bob Dole, Jack Kemp, Pete du Pont, Al Gore, Paul Simon, Gary Hart, all of the candidates, must be made to focus on this central issue, i.e. Do we want to make the Soviet Union an "economic superpower?"

In other words, through easier terms on trade, Gorbachev wants us to help him retain the repressive regime strangling Soviet citizens.

BUT WESTERN HELP accomplishes another Soviet objective. There is a point in the debtor-creditor relationship where the debtor, the person who owes the money, has more power than the creditor, the one who makes the loans. At what point that is achieved in the relationship between the West and the Soviet bloc, is yet unknown. But it is not a threat which we should take lightly.

Is Gorbachev different than his predecessors in the Kremlin? Has Soviet policy really changed? If it has, then Mr. Gorbachev can show it by pulling back on his commitments to destabilize those areas of the world that are critical to Western interest, by stopping the attempts to embarrass the United States in the Persian Gulf, by joining the United States in persuading Iran to stop the war in the Middle East, by joining with the United States in the embargo against Iran, by stopping the support of Nicaragua, Cuba, Mozambique, Syria, Libya, and the PLO. But there have been no such pledges, indeed they are stepping up their support for international terrorism according to our own State Department.

WE IN NEW HAMPSHIRE have the unique ability in the Presidential Primary on Feb. 16, to make our views known on this critical issue — the single most important foreign policy issue facing this country. We have a responsibility to ask the candidates where they stand on these issues.

#3

419

Pg. 2 - Commentary - Union Leader - Feb. 9, 1988

Lawrence J. Brady Writes About Trade

Are U.S. loans and trade propping up the Soviet Union? Should they be?

Starting today in a series of articles made especially timely by the upcoming Presidential Primary, Lawrence J. Brady looks at those questions and examines the facts.

Brady is former assistant secretary for Trade Administration, U.S. Department of Commerce. His series, written exclusively for the Loeb newspapers, begins today on Page 10.

Are they in favor of making the Soviet Union an economic superpower? Or are the candidates in favor of supporting legislation which has been introduced by a coalition of liberal and conservative senators and congressmen that would direct the President to work with the allies to devise a plan to end untied loans to the Soviets creating instead a system by which all loans made are for specific projects, and creating a reporting mechanism so that we all know exactly how much is being loaned to the Soviets.

Are the candidates in favor of a plan which will limit Soviet bond offerings in the West so that our pension and insurance funds, will not be captive of the Soviet Union's intrusive financial attempts in our own markets? We are entitled to get clear, unambigious answers to these questions from the Vice President Bush who wants to be President, and from the Senate Minority Leader Dole who wants to be President, as well as from the others, both Democrats and Republican, who are running for the highest office in the Free World.

A PRESIDENTIAL election year usually is an opportunity for candidates to explain to the American people their vision of how they would lead our nation in the domestic and foreign policy areas. Although we have had some discussion of the domestic area, generated by the large budget deficits and their impact, the 1988 Presidential campaign has been characterized by the absence of any real debate over what our country's foreign policy goals should be and how we should try to accomplish them. This Presidential campaign has degenerated into an attempt to see who can get the best media spot for the day.

Not one candidate has raised the issue of whether there is a secret economic addendum to the INF Treaty in which we have promised the Soviets to support their membership in the IMF, the GATT and the World Bank, agree to approve 11 major joint-venture projects to transform the Soviet economy, and grant most favored nation tariff treatment and U.S. Export-Import Bank subsidized government loans.

We are entitled to answers. George Bush, Bob Dole, Jack Kemp, Pete du Pont, Al Gore, Paul Simon, Gary Hart, all of the candidates, must be made to focus on this central issue, i.e. Do we want to make the Soviet Union an "economic superpower?"

The CHAIRMAN. Thank you very much indeed.

Mr. Sherr, who is the director of the Project on Soviet Foreign Economic Policy and Center for Foreign Policy Development at Brown University, which we are very proud and very glad to welcome you here, Mr. Sherr.

STATEMENT OF ALAN B. SHERR, DIRECTOR, PROJECT ON SOVIET FOREIGN ECONOMIC POLICY AND INTERNATIONAL SECURITY, CENTER FOR FOREIGN POLICY DEVELOPMENT, BROWN UNIVERSITY, PROVIDENCE, RI

Mr. SHERR. Thank you, Mr. Chairman. Senator Robb, Senator Sarbanes, Senator Biden, thank you for this opportunity to speak today. I commend the committee for these series of hearings.

I would emphasize that I believe the economic aspects of the Soviet-American relationship are central, and I think that it is a very good thing to spend as much time as possible exploring these issues.

Today I am going to be talking about a narrower part of this large question, which is that of joint ventures, commercial joint ventures between American firms, more broadly Western firms, and Soviet enterprises. It is now possible under Soviet law for an American firm to own up to 99 percent of an enterprise in Moscow with an American director and an American chairman of the board, a rather startling development compared to where we were 5 or 6 years ago.

There are basically four issues that are raised by people who are concerned about joint ventures and their implications, and these are all serious issues. I have developed my points in greater length in written testimony, and I will just highlight the points here.

These four concerns are, No. 1, that joint ventures in the investment by Americans and others will allow the Soviets to avoid the guns-to-butter conversion, the reallocation of resources from the military to the civilian sector.

The second concern is that joint ventures would allow the Soviets to avoid the basic structural changes that we have all been talking about as being essential for our interests and perhaps for theirs.

The third concern is that of technology transfer. Joint ventures would allow important technologies more readily to be absorbed into the Soviet Union because of the intimate contact between the partners.

Fourth, the broader question that has been raised by Senator Biden in the earlier panel, which is why should we help the Soviet Union become a strong economic power; is that ultimately in our best interest.

Let me address the first question, the guns-to-butter question. The Soviets are now in the process of converting some of their military assets to civilian uses. The objective and the motivation basically is that they have an enormous budget deficit with tremendous inflationary pressure behind it, and it is hoped that some of the conversion will deflate that by producing consumer goods and by other means.

The scope of this budget deficit is enormous. We have our own problems here with the budget deficit. The Soviet budget deficit is

approximately three times larger than ours in terms of percentage of GNP.

The scope that is needed with respect to military cuts is enormous. Gorbachev is now himself talking about military cuts in the order of 15 billion rubles per year over the next 2 years. Compared to the enormity of this task, look at what impact one might foresee for joint ventures. There are about 260 registered joint ventures right now. Many of them are in very marginal areas such as restaurants with very little economic impact. Only 20 percent of them are actually operating at this point, and this is 2⅓ years after the law went into effect.

The average foreign investments is only about $3 million. This includes not just the United States but all Western firms and a number of socialist firms that entered into joint ventures.

Senator BIDEN. The figure of 20 percent includes all joint ventures, not just joint ventures with the United States?

Mr. SHERR. Yes. The 20 percent was those operating at this point, Senator.

Senator BIDEN. Those are all joint ventures?

Mr. SHERR. That is right. The reason for this get-slow approach is not that any government has imposed a policy. It is because of the inherent structural limitations. The problem of hard currency repatriation because the ruble is inconvertible currency; the problems of obtaining supplies for production joint ventures, and so on.

I do not believe that there is any likelihood that in the next decade or two decades there will be any broadening of the possibilities from the enormous expansion of joint ventures of any scope that could possibly affect the conversion issue.

So, although there are more elaborate arguments to be made, I think that this particular concern is not a very important one.

Let me move to the second concern which has been raised several times, which is that joint ventures and other forms of Western investment can somehow inhibit the structural change that we all are looking for.

First of all, let me associate myself with the comments of Dr. Hewett to the effect that I believe that Gorbachev has become progressively more radicalized as he encounters all of these problems. He realizes that basic changes are needed and so do many of his colleagues.

Dr. Shelton referred to the fact that there are some significant rollbacks, and she is absolutely correct; for example, in the area of prices, price reform and cooperatives. This has come, however, from the bottom, from the citizens who are reacting to the changes. The leaders, in effect, are way out in front of the citizens. The leaders are only taking a politically necessary step in rolling back the reforms.

I have observed by participating in negotiations in which American businesspeople have participated in Moscow that joint ventures, although having a marginal impact, in some respects encourage the structural changes rather than inhibit it.

The reason I say this is that U.S. businesspeople travel to Moscow and, although there are very few joint ventures, they are politically highly visible. The U.S. businesspeople meet with very important officials all the way up to the Gorbachev level in

Moscow and spend an inordinate amount of time talking with them about what is wrong with their economy, how you can make this difficult transition to a more decentralized, competitive sort of economy. Along with all of that, of course, all of the political, social, and legal changes that are needed.

I would emphasize here the legal because the Soviets do not have corporate law, and all of a sudden they are trying to create corporations, not just joint ventures but they are trying to encourage private corporations in effect, cooperatives they call them, and also greater initiative by enterprises.

Yet, there is no law or practically no law to regulate and to allow one person to effectually make sure that they are going to get their supplies and so on and so forth. There are Americans, French, West Germans, and others, who are discussing this with them and thereby in some marginal way, and I would not overemphasize the impact but I do think there is some positive impact.

Let me move to the third question, that of technology transfer. I think this is a very serious issue and one that requires further study. It certainly is an objective of the Soviets to obtain high technology and managerial know-how from the West. That is their stated objective.

Let me point out, however, we do have export control regulations and COCOM. They are being applied with particular vigor, I think, to joint ventures. In addition, businesspeople themselves are applying a sort of self-policing approach, the reason being that if they are just making a direct sale and they get a license and it is refused, all right, they have invested nothing and that is that. The deal falls through.

If they go in and invest lots of equipment and time and people into the Soviet Union and then somewhere down the line 2 or 3 years from now they do not get their license because they are in a marginal area of export control, they are in serious trouble. They have lost their investments effectively.

So, there is a certain self-policing that is going on, and I do not see joint ventures as a particularly dangerous part of this problem. I encourage and think that we still need very stringent and deep looks at export control regulations.

The fourth area is that of a stronger Soviet Union and what it implies. The essence of this matter, I think, the question of strengthening the adversary, cannot be divorced from the question of changing the adversary. Perestroika is aimed at gaining strength, but it is also premised on fundamental change. The latter point was not clear several years ago, but it is clear today that only fundamental change provides the Soviet Union with a chance to be a significant world player in the next century.

This is apparent not only to Westerners but also to the reform-minded among the Soviet leaders. The amorphous concepts of Gorbachev's new ways of thinking including the primacy of global power, the primacy of economics, common security, and the importance of international law have increasingly become the standard by which the world feels entitled to judge Soviet foreign behavior.

These high standards in the foreign policy realm are matched by the groundswell of support for democratization and glasnost on the home front. I think that it is in our interest certainly to encourage

these trends; that a strong Soviet Union is not going to imply a competitively aggressive Soviet Union in any foreseeable future. They are not going to become a mega-Japan. They have just too many obstacles to overcome.

On the other hand, I think that the trend is toward a greater acceptance of Western values and of Western techniques and Western institutions, in effect, and that this process is driven by some measure of economic success and that the opposite, economic failure will inevitably lead to a tightening of rule inside the Soviet Union as applied to Eastern Germany and the danger to the West.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Sherr follows:]

4. Finally, there is the conviction that a "sick bear" is better than a healthy one.[4] The USSR and the US are natural adversaries, and it makes no sense to purposefully strengthen one's adversary.

Each of these issues deserves the most serious consideration. What follows is an attempt to highlight key points that should enter into a discussion leading to political decisions on U.S. policy directions.[5]

II. Resource Reallocation -- Guns versus Butter

Encouraged by Gorbachev's stated commitment to reduce defense expenditures and to require defense industries to shoulder more of the burden of perestroika, numerous Soviet officials in the past several months have extolled the virtues of defense-to-civilian "conversion."[6] The extent, and the

---

3. Ibid. (emphasis added). See also Steven L. Carter, "Does it Make Sense to Enrich the Soviet Bloc?," Directors & Boards, Vol. 13, No. 1 (Fall 1988).

4. See Henry S. Rowen, "Living with a Sick Bear," National Interest, Winter 1986, p. 14. The U.S. Defense Intelligence Agency states that perestroika "is aimed, as all of [Gorbachev's] predecessors have sought to do, at assuring the long term security of the nation. . . . Should Gorbachev's program be successful, the United States will be facing a substantially stronger Soviet Union, economically, politically and militarily, in the twenty-first century." U.S. D.I.A., "Statement to the Subcommittee on National Security Economics, Joint Economic Committee," Sept. 14, 1987, p. 10.

5. The Center for Foreign Policy Development at Brown University has undertaken analytical work, and has assembled a blue-ribbon study panel, to address in detail the question whether it is in the best interests of the United States to improve economic cooperation with the USSR.

6. See, for example, the statement of deputy minister of finance Vyacheslav Senchagov that conversion could play a considerable role in the urgent task of reducing the Soviet budget deficit. Moscow TASS, Feb. 21, 1989, as reported in Foreign Broadcast Information Service, Soviet Union Daily Report (FBIS-SU), Feb. 23, p. 92. Igor Belousov, vice-chairman of the Council of Ministers of the USSR, recently stated that as many as 345 defense enterprises have begun

effect, of any such conversion is still a matter of debate in Western circles. The uncertainties involve as much the inherent obstacles to transferring resources between sectors of the Soviet economy as they do the difficulties of assessing Soviet statistics and gauging Soviet intentions.[7]

Notwithstanding this uncertainty, it is clear that joint ventures cannot have a significant impact on whether conversion takes place, continues, or succeeds. There is simply too great a disparity between, on the one hand, economic problems such as the budget deficit and the gaping lack of quality consumer goods that motivate a guns-to-butter shift and, on the other hand, the small quantitative impact that joint ventures can reasonably be expected to have.

A few figures bear out this assertion. From January 1987, when the joint venture law was put into force, to date, only about 260 joint venture agreements have been registered with the USSR Ministry of Finance.[8] Many of these joint ventures exist only on paper, some are of very marginal economic importance (such as individual restaurants), and most are under-capitalized. It is true that there is an inherent lag in the registration process due to

---

producing equipment for the light and food industries, accounting for 20% of all such equipment produced in the USSR. As part of a comprehensive conversion plan, "the output of food industry equipment by defense industry enterprises will be increased 2.3-fold more by 1995," he promised. Moscow TASS, Feb. 9, 1989, as reported in FBIS-SU, Feb. 10, p. 90.

7. See Philip Hanson, "USSR Economic Reform and the Defense Sector," Radio Liberty Research, April 18, 1989; Central Intelligence Agency and Defense Intelligence Agency (CIA-DIA), "The Soviet Economy in 1988: Gorbachev Changes Course," a report to the Joint Economic Committee, April 14, 1989, pp. 14-21.

8. Periodically, lists of registered joint ventures are published in Ekonomicheskaya Gazeta, for example, Nos. 44-46, 48-51 (1988) and 2-4, 6 (1989). The lists include the equity shares of the partners, the principal activity of the venture, and the ruble value of the initial capitalization. For an excellent statistical analysis of registered joint ventures through the first quarter of 1989, see PlanEcon Report, Vol. V, Nos. 10-12, March 25, 1989. The figure of 260 joint ventures includes ventures with enterprises from other socialist countries, which make up about 10% of the total.

the time needed to negotiate a joint venture. Soviet officials say that they expect 800 to 1,000 joint ventures to have been registered by the end of 1989 -- a sharply increased rate of additions compared to 1988 and 1987. Nonetheless, the average amount of foreign investment is small,[9] and Soviet officials are openly disappointed both with the pace of investment and the difficulties in reaching economically significant joint venture agreements.

This is not a problem that Soviet officials can solve by cajoling either Western business people or Western governments. The "go-slow" approach to investment in the USSR is dictated by fundamental problems in the Soviet economy that cannot be changed by fiat. A principal constraint is the non-convertibility of the ruble, which makes it difficult for Western investors to realize a profit in freely transferable, or hard, currency. The highly centralized system of allocating and distributing resources, although technically not applicable to joint ventures, in practice adds substantial uncertainty to those joint ventures that rely on Soviet inputs. Another basic constraint is the "risk" of doing business in the USSR -- not in terms of a fear that the joint venture will be liquidated or nationalized, but that poor Soviet supplies and workmanship will lead to inferior products that will besmirch the reputation of the foreign partner. Perestroika explicitly aims to overcome these problems by taking power away from the central ministries, by creating new national systems for distributing information and resources, and by motivating workers and educating managers. However, this will certainly be a slow and difficult process taking decades to implement.[10]

---

9. According to PlanEcon, see note 8, above, the first 205 joint ventures registered through January 13, 1989 showed an average initial foreign investment of only 1.63 million rubles, or about $2.7 million at the official (and highly inflated) exchange rate. As the report notes, however, these low figures are not indicative of future developments since small joint ventures are more quickly negotiated than larger ones. Moreover, initial capitalization is clearly an inadequate indicator of ultimate levels of production or earnings. The initial capitalization figures do, however, indicate in rough terms the relatively small contribution of joint ventures and the slow rate of their development.

10. The Soviet government could facilitate the growth of joint ventures by creating special economic zones, authorizing special exchange rates, providing special sources of hard currency, foregoing taxes, and other means. This would require a political decision that it is worth drawing down valuable resources in order to "prime the pump" of foreign investment in the USSR.

It is thus unrealistic to think of joint ventures as a way of introducing a sufficient number and range of goods into the Soviet economy to absorb excess savings (and satisfy consumer demand) and thus substantially reduce the inflationary pressure of the budget deficit (and hence eliminate part of the motivation for the military-to-civilian conversion).[11] Nor can this same effect be achieved through the import of foreign goods using the hard-currency export earnings of joint ventures. Except for joint ventures in the energy area, where new facilities and control systems are expected to increase productivity, it is unlikely that significant amounts of hard-currency earnings will be realized by this new form of cooperation in the foreseeable future. This is because of (a) the slow pace of agreement on and implementation of joint ventures (due to a myriad of factors such as the problems of reliable supply and quality, lack of office space and housing for expatriates, issues of hard-currency repatriation, etc.),[12] (b) the fact that some joint ventures contemplate little or no hard-currency profit (the Western partner realizes profit instead through the sale of components to the joint venture which draw down the joint venture's sales for hard currency), and (c) reliance on import substitution or other means of obtaining hard currency from within the USSR (for example, by selling joint venture products to ministries, enterprises, or cooperatives) either because the Western partner does not want to compete with

---

Even if such measures doubled the rate of investment, however, the impact in terms of quantity of domestic products or hard currency generated would pale beside Soviet needs.

11. The scale of Gorbachev's conversion commitment can roughly be gauged by his promise in January 1989 to reduce the defense budget by 14.2 percent in 1989 and 1990 -- a reduction that would require wide-spread cuts in military research, development and procurement in view of the large current levels (about 15% of GNP, or 110 billion rubles) of defense spending. See CIA-DIA, note 7 above, pp. 18, 40.

12. For a discussion of these and related issues, see Alan Sherr, Briefing Paper #1 -- Socialist-Capitalist Joint Ventures in the USSR: Law and Practice, CFPD, Brown University, May 1988.

itself in hard-currency markets or because of lack of acceptance on the world market of goods made in the USSR.

Granted even that hard currency earnings are worth far more in ruble terms than the official exchange rate would indicate, Soviet needs are so enormous that many times the earning capacity of foreseeable joint ventures would be required to appreciably ease the building domestic inflationary pressure. Officially reported savings by Soviet citizens in state banks is in the range of 250 to 300 billion rubles, and some unofficial estimates put the level of savings under the mattress at about the same level.[13] At best, any marginal improvement in the quality, variety, and quantity of consumer goods contributed directly or indirectly by joint ventures might instead take some of the edge off of consumer discontent and provide some psychological basis for a belief that perestroika is working and is worth supporting.

In sum, joint ventures cannot produce enough goods to satisfy industrial and consumer demand and thus obviate the need for substantial cutbacks in the defense sector. Similarly, Western concerns are misplaced to the extent that they envision that joint ventures will provide the Soviets with appreciable amounts of hard currency that can be used to finance expansionism, or to buy high technology weapons components or the means of producing high technology weapons.

III. Structural Change -- Do Joint Ventures Inhibit or Encourage It?

Events in the Soviet Union are so fast-paced that it is easy to forget recent history -- as recent as 1985 when Gorbachev came to power. The public shape of perestroika at that time was far different than it is today. Gorbachev and his colleagues spoke then about the importance of "accelerating" intensive development, of relying on the economic power of the USSR and its socialist allies to coax the economic system back on course. The Soviet

---

13. For the official estimate, see A. Sashin, "In the Mirror of Statistics: Saved Rubles," Pravda, Dec. 25, 1987, p. 6, in FBIS-SU, Jan. 4, 1988, p. 65.

leaders were decidedly cool to the notion that capitalist nations or firms should play a significant role in Soviet economic restructuring.

Gorbachev and other high officials shared the concern, now expressed by some Westerners, that undue reliance on outsiders (most emphatically capitalist ones) could undermine the restructuring effort. Referring to the debilitating debts amassed by Poland during the 1970s, Gorbachev recalled that "we understood too late what kind of traps are laid on the trading routes leading to the West." While it was not appropriate to "fold up economic links with the West," it was important to "make rational use of them, eliminating excesses and preventing dependence."[14] Similarly, Prime Minister Nikolai Ryzhkov pointedly warned of the lulling effect that Western assistance can have on Soviet initiative.[15]

The steadily increasing interest of Soviet officials in attracting foreign investment to the USSR[16] does not indicate that they have suddenly forgotten the dangers of relying too heavily on others and are in danger of neglecting the need for domestic housekeeping. To the contrary, the insistence by Gorbachev that economic reform must be radical and pervasive grows in pace with the seriousness of the economic situation and with the realization that entrenched ways of thinking and acting must be broken. Moreover, Gorbachev has put into place social and political mechanisms -- glasnost and democratization -- that strengthen the popular demand for basic structural reform. In fact, one could surmise from Gorbachev's use of the media to

---

14. Mikhail S. Gorbachev, speech to the Tenth PZPR Congress in Warsaw, broadcast by Moscow Television Service, June 30, 1986, in FBIS-SU, July 1, p. F5.

15. Although he spoke about the effects of purchasing Western equipment, Ryzhkov's concerns could easily be applied to relying on Western investment. See Nikolai Ryzhkov, "Report to the 27th Party Congress on the Basic Guidelines for the Economic and Social Development of the USSR for 1986-1990 and the Period Through the Year 2000," Pravda, March 4, 1986, p. 2.

16. More generally, the government has taken halting steps to broaden direct contact between Soviet enterprises and foreign firms. See Eric Stubbs, "Soviet Ruble Devaluation and Currency Convertibility, Perspective, No. 1, Center for Foreign Policy Development, Brown University (Feb. 1989).

publicize popular discontent with the pace of perestroika that he believes that the only way to force fundamental change is to emphasize the crisis conditions that require sacrifice and resolution.[17]

Rather than inhibiting this process, joint ventures are proving to be a useful means for supporting perestroika. Although few in number and small in economic size, joint ventures are frequently highly visible and important politically. When Western bankers and business executives come to Moscow to negotiate their joint ventures, they typically deal, at least initially and when problems develop, at the higher levels of ministries, state committees, and banks. The aim of the discussions is basically to convince Soviet officials of the need to accelerate and cement reforms. Specifically, Western negotiators are looking for implementation of new market mechanisms that will allow them to accurately judge and respond to consumer demand; obtain high-quality supplies on time and on competitive terms; and obtain competitive financing, insurance, and other basic business services.

Even more important, the need of Soviet officials to respond to Western demands in the contexts of joint venture negotiations accelerates the process of drafting and implementing corporate and financial law in the USSR. This process of "legalizing" Soviet society is a necessary adjunct to the effort to introduce throughout the Soviet economy wholesale contracting and pricing, self-accounting, and "socialist competition." Joint ventures support and accelerate this process because the demands are clear and unceasing from external sources (as opposed to the mixed signals being generated within the Soviet economy) and because Soviet reformers may be seizing on joint ventures (as well as cooperatives) as tools for goading the system into action.[18]

---

17. A logical extension of this reasoning, although perhaps not a view shared by the Soviet leadership, is that the precipitous drop in oil prices that has contributed so substantially to the Soviets' hard-currency shortage has had an unexpected silver lining -- it has forced the Soviet Union to look inward to radical economic change rather than outward for crutches.

18. Like joint ventures, private cooperatives provide a visible comparison between the inefficiencies of the old ways and the productivity that can be achieved by removing barriers to individual initiative and enterprise. On the negative side, private cooperatives have come under enormous pressure because they have produced over-night "millionaires" -- people who serve not as ex-

In addition, joint ventures are naturally attractive to Soviet managers and workers. For managers, they are a unique tool for acquiring convertible currency and hard-currency credits, for obtaining preferential supplies through state orders or ministry plans, and for opening contacts with Western firms that can lead to otherwise unavailable professional growth and personal reward. For workers, joint ventures promise better training, higher wages, and the possibility of cashing in a part of those wages for Western goods or travel to the West.

This modest leverage available to the West to influence the course of perestroika owes its force in part to the positive political climate with respect to East-West relations. There is a symbiotic relationship at play that is more subtle than the idea that increased trade or investment increases vested interests on both sides and thus leads to stability. Rather, the experience of dealing with Western business people and attempting to accommodate Western business practices inside the framework of the Soviet economy could reinforce a notable tendency over the past two years toward greater acceptance of Western philosophies, social and political as well as economic. This trend was given impetus by the good will surrounding the signing of the INF Treaty and the Reagan-Gorbachev Washington summit in December 1987. Travel notes from the growing number of Soviet visitors to the United States, which depict everyday life in the U.S. in a relatively positive light, have been published broadly in the USSR. More significantly, selected attributes of the U.S. economy are being presented to the Soviet people as worthy of emulation and Soviet readers are being told officially what they already knew -- that living standards in the U.S. are higher than in the USSR.[19]

---

amples of success but of exploitation and manipulation. Many of these contradictory views are captured in parallel interviews with a worker who has found cooperatives to be exploitative and another who has found work there stimulating. See "Money or Life: Two Extreme Views on Cooperatives," Moscow News, No. 16, 1989, p. 13.

19. For an overview of the Soviet sources, see Vera Tolz, "How the Soviet Press Views the United States Today," Radio Liberty Research, RL 469/88, Oct. 10, 1988.

In line with this re-evaluation of Western economic life, and responsive to Gorbachev's efforts at political perestroika, are some rather dramatic statements about the positive aspects of political mechanisms central to Western democracies. One commentator, employing the customary practice of finding acceptable historical precedents, has even ventured that "it was probably wrong to have rejected the ideas of the great revolutionary democrats of the past [led by Lenin] on the separation of the legislature, the executive, and the judiciary."[20]

It is thus clear that there has emerged in the USSR an alternative way of looking at the economic and political systems of the capitalist countries. This does not imply, however, that there is anything approaching consensus on the benefits of market mechanisms or the depth to which command mechanisms must be jettisoned. Nor have many Soviet commentators and officials abandoned efforts to highlight perceived negative attributes of the capitalist system and emphasize the supposed superiority of socialist approaches. But it is a fact that the unrelenting self-criticism that has been unleashed by glasnost and perestroika is feeding a trend toward positive assessments, if not emulation, of some aspects of capitalist economic and political systems. It is in this new economic and political context that one must assess the implications of increased East-West economic cooperation.

IV. Technological and Managerial Transfer

There is substantial merit to the concern that the joint venture mechanism could be an effective conduit for transferring technological and managerial know-how to the Soviets. Indeed, this is the stated rationale of the Soviet joint venture law. There is no mystery about Soviet objectives; they want access to high technology and want to learn how to make better use of their human and other resources. The current popularity of joint ventures

---

20. Fyodr Burlatsky, "On the Soviet Parliamentarianism," Literaturnaya Gazeta, June 15, 1988, in FBIS-SU, June 16, p. 48.

is due in part to the perceived need to satisfy political directives from the highest authorities, but it is also based on the historical fact that turnkey factories, licenses, and other means of economic cooperation have proven too limiting in the Soviet context. Foreigners have sold factories or licenses that have rapidly been outdated, if they were not obsolete by the time they were acquired. The Soviets want joint venture partners who are committed to cooperation, and to continued technology and managerial transfer, over a long period.

However, it is not just any transfer of technology or managerial know-how that is threatening to U.S. interests. Extensive U.S. federal law and regulation, as well as international practice under COCOM (Coordinating Committee for Multilateral Export Controls) rules, focus on types of transfers -- whether of a clearly military nature or of "dual-purpose" or other variety -- that may undermine U.S. interests. Although there are significant differences of opinion among the countries in COCOM about the purpose and utility of export restrictions, the ongoing East-West military rivalry is still too real to admit Soviet calls for eliminating them. The real question thus is whether joint ventures pose a new and particular difficulty in enforcing existing export controls and COCOM restrictions.

The fact is that these controls are likely to be, and are being, applied with particular force and vigor to joint ventures because of the more intimate contact between Western and Soviet partners. Thus, a prospective U.S. partner entering a joint venture in an area of marginal acceptability in terms of export controls will be taking a risk that export licenses will not be renewed or that future directions taken by the joint venture will be found to be unacceptable in terms of export controls. The effect can be much more severe than the mere refusal of a license for direct sale to the USSR; the joint venture partner may already have made a substantial investment that is subsequently compromised. The result will likely be to impose a higher threshold on joint ventures than on one-time trade agreements with respect to satisfying both governmental concerns over technology transfer and business concerns about acceptable risk. In other words, governmental policing is augmented by the effective self-policing of U.S. business people who must perceive a significant

business risk associated with joint venture investment in the gray areas of technology transfer controls.[21]

Continuing analysis is called for, but experience with joint ventures to date suggests that the problem of high technology transfer has been more apparent than real. The vast majority of registered joint ventures are in the service and consumer sectors and involve technologies that are neither advanced nor remotely related to military applications.[22] This fact is due in part to the reality that Soviet needs are frequently for low-technology products -- for example, food packaging -- rather than flashy technologies. In fact, the under-developed and poorly administered Soviet infrastructure often cannot support higher technology products. The dominance of lower technology joint ventures is also due to the reluctance of Western firms to provide the Soviets with state-of-the-art products and know-how that might allow the joint venture to become competitive on world markets with the foreign partner itself, or allow the Soviet partner to become a competitor.[23]

The question of espionage risk also has some merit, as well as some countervailing considerations. It is a fact that joint ventures encourage extensive contacts between Soviet officials, managers and workers, and Western business people and employees. However, the espionage risk would seem to be at least a two-way street, and probably one running mainly to the theoretical advantage of the Western side. A Western business person -- perhaps one traditionally viewed as being of the "ruling circle" of capitalist exploiters

---

21. Efforts are also being made to sensitize U.S. firms to the potential for inadvertently supporting Soviet behavior inimical to Western values and interests. The focus extends beyond dual-use support of the Soviet military to such areas as religious or ethnic discrimination. See The Slepak Report, Vol. 1, No. 1 (March 1989).

22. See CIA-DIA, note 7 above, p. 24.

23. This may be the dominating factor, since the Soviets -- notwithstanding their inability fully to utilize new technologies -- have consistently placed a strong emphasis on increasing industrial productivity by rapid modernization and automation generated by the machine building sector.

-- is being invited to set up an extensive operation inside the Soviet Union, with largely unsupervised access to workers, suppliers, customers, and a variety of local and central officials. Communications links, by telephone, telex, fax, and other means, are sure to proliferate as the Western business person, perhaps buttressed by a majority ownership of the venture, demands greater control over operations. These prospects must give pause to those Soviets who resist perestroika and who remain suspicious of Western motives.

These and other considerations require intensive examination in order to arrive at a judgment concerning the degree of risk to U.S. interests posed by transfer of technology and know-how through joint ventures.

V. Is the U.S. Threatened by a Stronger Soviet Union?

As already noted, there are clear links between economic perestroika on the one hand and, on the other hand, legal, social and political reform in the USSR and greater acceptance of and movement toward Western values. The danger that these trends in the Soviet Union can be reversed should not be underestimated. It is obvious that the Gorbachev leadership is in a very tenuous position. It is pressed on the one side by the rising challenges of nationalism and other manifestations of a society coming to terms with glasnost and democratization. Some effects of this social revolution, such as rising crime and alienation of the younger generation, and wide popular reaction to the full exposure of the crimes of the Stalin era, are only just beginning to surface in a visible way. On the other side, perestroika is visibly failing to produce promised benefits while hardships are growing. These circumstances present the opposition with powerful tools to slow perestroika further and ultimately to undo it. To the extent that joint ventures produce goods that are desired by Soviet consumers and hard currency to support economic restructuring, the foreign investment marginally supports perestroika and the closely associated legal, social, and political reforms.[24]

---

24. The fragility of perestroika is very much on the minds of Soviet reformers and citizens, and is openly discussed in the press. This discussion is itself pushing reforms forward. As one commentator recently stated: "Where is that objective social regulator that will preclude forever a return to the 'old thinking' . . .? [It] can only be the entire system of a law-governed state

The essence of the matter is that the question of strengthening the adversary cannot be divorced from the question of changing the adversary. Perestroika is aimed at gaining strength, but it is also premised on fundamental change. This latter point was not clear several years ago, but it is clear today that only fundamental change -- social, legal, and political, as well as economic -- provides the Soviet Union with a chance to be a significant world player in the next century. This is apparent not only to Westerners (and other foreigners), but also to the reform-minded among the Soviet leaders. The amorphous concepts of Gorbachev 's "new ways of thinking" -- including the diffusion of global power, the primacy of economics (as opposed to military power) in foreign policy, common security, and the importance of international law -- have increasingly become the standards by which the world feels entitled to judge Soviet foreign behavior.[25] These high standards in the foreign policy realm are matched by the ground swell of support for democratization and glasnost on the home front.

Moreover, the significant fact is that the evolving standards for Soviet government behavior at home and abroad are slowly, and tentatively, being institutionalized. The stability and irreversibility of the changes are not dependent on good will, trust, promises, or agreements. Truths are being told about Stalin's crimes, communist party failings, and other historical facts that have been known but now can never again be denied. Enterprise managers and officials are being exposed to new ideas about the work place and the economy and, more significantly, are being given a taste of what individual initiative and control can accomplish and what they feel like. There is yet to be a significant dismantling of the stifling government bureaucracies, but

---

-- a socialist parliament, an independent court and constitutional supervision. But granted all these conditions, freedom of the press will remain the most important guarantee of the irreversibility of changes." Vladimir Lakshin, "From Glasnost to Freedom of Speech," Moscow News, No. 15, April 16, 1989, p. 4.

25. See Alan B. Sherr, The Other Side of Arms Control: Soviet Objectives in the Gorbachev Era, Boston: Unwin Hyman (1988), pp. 1-48, 277-297.

incremental progress is being made. The party apparatus is still superficially intact, but the stature of the party is low and the emergence of democratic institutions, encouraged by the recent elections to the Congress of People's Deputies, is proceeding faster than anyone had expected.

The influence exerted by the presence of Western business people in the USSR, and by the reciprocal business and training trips by Soviets to the West, cannot help but cement reform ideas and support the emerging institutional changes. There is little danger that this process will go too far. The spectre of the Soviet Union becoming a "mega-Japan" that is a purely economic threat to the U.S. and the West is unrealistic -- the Soviets will do well to reduce the alarming rate at which they are falling behind the capitalist countries. They are far from assuming a dominant economic position. Most significantly, if the USSR ever does approach a level of economic accomplishment that makes them our competitor, it will also be because it has become a very different country than the one that was our cold war adversary.

The policy decision for the U.S. posed by the dynamics of Soviet strength and change must be based on thorough analysis of developments in the Soviet Union and an unemotional examination of U.S. interests. It will, in the end, be a political decision reflecting Americans' view of where they want our country to go in the coming decades.

The CHAIRMAN. Thank you very much, Mr. Sherr.

We now turn to Mr. Kiser, who is president of Kiser Research, Inc., and who has been known to me for many years.

Welcome, Mr. Kiser.

STATEMENT OF JOHN W. KISER III, PRESIDENT, KISER RESEARCH, INC., WASHINGTON, DC

Mr. KISER. Thank you, Mr. Chairman. I would like to thank the committee and the staff for the privilege of being able to talk to you today about United States-Soviet economic relations.

My remarks are going to be made from the perspective of a technology broker. I am the president of a company whose business mission is to create an institutional vehicle for the ongoing transfer of proprietary technology from the Soviet Union and Eastern Europe to the United States. We have been in business 3½ years, and our clients are U.S. manufacturers who are seeking better solutions for developing new products and cheaper processes.

I believe we are——

Senator BIDEN. Excuse me, Mr. Kiser. I beg your pardon. I was trying to read your statement. You said your company is to seek what? What is the purpose?

Mr. KISER. Our mission is to become an institutional vehicle, an ongoing organization, the mission of which is to bring Eastern bloc brainpower, trade secrets, know-how, technological advantage and apply it in the United States.

Senator BIDEN. It sounds like you would be able to do that job.

Mr. KISER. Pardon?

Senator BIDEN. I said I think you will be able to do that.

Mr. KISER. Well, I hope so. It is not a walk-off-the-shelf kind of business but there is a history of this activity, and our business is to accelerate the pace of change.

For your interest as an aside, I got into this business because of some State Department contracts awarded 8 years ago to look into this phenomenon of East to West technology transfer, and it turns out a number of major U.S. manufacturers have been buying proprietary technology from the Soviet Union ranging from Air Products in Pennsylvania to Kaiser Aluminum in the State of Washington to Du Pont in Wilmington. However, I do not want to get too diverted on the details.

I believe there are tremendous opportunities, technological and economic, offered the United States by perestroika and glasnost. I would like to mention some of these opportunities in connection with both.

Glasnost has at least two faces to it. The one we are most familiar with, of course, is political glasnost, seeing Soviet politicians on television arguing with each other. There is another aspect of glasnost which has actually been around for quite a while but is going to accelerate, and this is alluded to in some detail in the articles that I wrote in the Washington Post on March 12 which I would like to submit for the record.

The CHAIRMAN. Without objection.

Mr. KISER. Basically, in that article I point out many case histories, examples, anecdotes of companies that have gained a techno-

logical benefit simply by virtue of being able to read about technological innovation in Soviet open source publications.

Du Pont 20 years ago made a major change in its manufacturing technology for making a chemical intermediate because of material they read in Soviet literature. A major rocket propellant manufacturer produces a more powerful rocket propellant because of material that they had picked up in the Soviet literature about using new chemical substances.

Varian, a producer of microwave equipment, microwave tubes, has gained substantially by accessing Soviet open source literature.

They have all exemplified what goes on internationally all the time. Any organization, any engineer worth his salt is going to copy somebody else's idea if it looks like it is a better way of solving his problem.

I believe more benefits will be possible in the future. Perestroika is something that has been talked about a lot, and unfortunately it is often spoken of as if it is some sort of binary on/off definitive process. I do not believe it is.

To me, it is very similar to what we went through in the 1930's. There is a crisis, and nobody really knows exactly what to do so there is a lot of experimentalism going on. Nobody is really sure what the boundaries of that experimental process should be, either.

There is one component of this that has relevance to my testimony; namely, as Mr. Sherr alluded to, under perestroika there is an acceleration of the process that started under the Brezhnev period, redeploying defense industry assets to help the civilian economy but also to make that same knowledge base available to foreign countries, to the Western world. Going back 20 years ago they were selling defense-related technology to the West.

Ambassador Dubinin last night indicated that whereas the average output of the defense industry's ministries is about 40 percent of their output being dedicated to civilian products, they hope over the next 5 years to increase that to 60 percent.

A corollary to this desire to increase the production capacity dedicated to civilian needs is a growing realization that if they want to sell technology and to be competitive in world markets, they are going to have to face the fact that most of their best technology is defense-related, is dual-use, and is going to come out of their defense industry which has nine ministries, including the shipbuilding ministry, the aviation ministry, and so forth.

Like in our country, most of these technologies have dual uses. Our own Defense Department singles out microwave technology as an area in which the Soviets are clearly ahead of us. Microwave tubes can be used for all kinds of military applications but can also be used to bust open oranges, to shell peanuts, to dry wood. So, there are many things one can do with this defense-based technology that is in the Soviet Union and is in many cases is very advanced.

So, why should the U.S. Government and industry be interested in this phenomenon?

I think in the case of industry it is fairly obvious that any company worth its salt is going to want to buy a better mousetrap if they find one, whether it is in China, France, Italy, Russia, Venezuela, or California.

What we see here is the opportunity to tap increasingly into 20 percent of the world's brainpower, engineering, and scientific talent and exploit their achievements and put them to work over here. Several companies have done this successfully already. U.S. Surgical Corp. in Stanford, CT, has built a very significant business around Soviet technology for surgical stapling.

Multi Arc Vacuum in Minnesota has developed a very successful new business around Soviet coating technology. Kaiser Aluminum built a $250 million plant in the State of Washington based on Soviet technology for manufacturing aluminum ingots.

Texas Utilities Co. bought Soviet technology 10 years ago to gasify coal in situ, and they considered it an insane waste of money that the United States Government was spending all its R&D money to figure out to gasify lignite and brown coal and shale when the Russians have been doing it for 20 years.

In the case of the Government, I think the reason why the U.S. Government should be interested is similar to industry on one level; namely, there is a lot of Government R&D going on, and why should the Government also reinvent the wheel.

Beyond that, there is a large black hole that needs to be better used, and that black hole is the intelligence gathering system that we have set up to collect information out of the Soviet open source literature about their technological developments. Most all of this is dual-use technology.

I think there is tremendous potential to leverage this investment in collecting information about what the Soviets have that is threatening. Look at those same data points not as threats but as opportunities and to use the expertise of our own Government R&D managers and experts to look at these threats like microwave power or nuclear power and convert those into opportunities for U.S. industry.

Thank you very much.

[The prepared statement of Mr. Kiser and addenda follow:]

PREPARED STATEMENT OF JOHN W. KISER, III

I'D LIKE TO THANK THE CHAIRMAN AND THE STAFF FOR PROVIDING ME WITH THE OPPORTUNITY TO TESTIFY BEFORE THIS COMMITTEE THIS MORNING. I WOULD LIKE TO TALK ABOUT PERESTROIKA FROM THE POINT OF VIEW OF A TECHNOLOGY BROKER. THESE ARE EXCITING TIMES, AND I WILL TALK ABOUT OPPORTUNITIES FOR TECHNOLOGICAL AND ECONOMIC GAIN MADE POSSIBLE BY PERESTROIKA. WE HAVE BEEN INUNDATED WITH NEW STORIES ABOUT GLASNOST AND PERESTROIKA OVER THE LAST YEAR AND A HALF. I WILL TALK BRIEFLY ABOUT GLASNOST AND PERESTROIKA AS THEY RELATE TO MY BUSINESS.

GLASNOST HAS TWO DIMENSIONS, ONE WHICH IS NEW AND SHOCKING FOR MANY AMERICANS, AND THE OTHER WHICH IS NOT SO NEW. SOVIET GLASNOST HAS TWO DIMENSIONS. ONE IS POLITICAL, AND THE OTHER IS TECHNICAL. IN ITS POLITICAL DIMENSION, THE OPENNESS WE ARE WITNESSING IN SOVIET SOCIETY IS, INDEED, STARTLING AND ENCOURAGING. WE ARE SEEING POLITICAL DEBATES OPENLY PUBLICIZED ON SOVIET TELEVISION. AMERICAN POLLSTERS ARE BEING ALLOWED TO WANDER AROUND THE STREETS OF MOSCOW INTERVIEWING SOVIET CITIZENS AND ASKING PROBING QUESTIONS.

THERE IS ANOTHER PART OF GLASNOST, HOWEVER, WHICH RELATES TO MY BUSINESS AND WHICH IS NOT AS NEW. THIS IS TECHNOLOGICAL OPENNESS. EVERYTHING THAT IS HAPPENING TODAY THAT IS NEW AND STARTLING IS NOT NECESSARILY BRAND NEW. FOR MANY YEARS, THE SOVIETS HAVE HAD A REPUTATION WITHIN THE SPECIALIZED TECHNICAL COMMUNITIES IN THE UNITED STATES AS BEING EXTRAORDINARILY OR SURPRISINGLY OPEN ABOUT THEIR TECHNOLOGY, AS REFLECTED BY WHAT THEY WILL PUBLISH AND WHAT THEY ARE WILLING TO SELL AND WHAT THEY ARE ARE WILLING TO REVEAL OPENLY AT EXHIBITIONS. MORE DETAILED EXPLANATIONS OF SOME OF THESE PHENOMENA WERE DESCRIBED IN AN ARTICLE IN THE WASHINGTON POST THAT I WROTE ON MARCH 12TH AND IS ATTACHED TO MY TESTIMONY WHICH I AM SUBMITTING TODAY.

TO GIVE YOU A FEW HIGHLIGHTS, LONG BEFORE PERESTROIKA CAME ALONG, THERE WERE MANY INSTANCES, WHICH CAN BE DOCUMENTED BY THE

AMERICAN TECHNICAL COMMUNITY, INCLUDING DEFENSE RELATED RESEARCHERS EXTRACTING FROM OPEN SOVIET SOURCES VALUABLE INFORMATION THAT HAS DRIVEN AND STIMULATED OUR OWN R&D PROGRAMS AND PRODUCED TANGIBLE BENEFITS. THESE RANGE FROM NEW WAYS TO MAKE CHEMICAL INTERMEDIATES ADOPTED BY DUPONT, TO THE IDEA OF PUTTING HIGHLY TOXIC BERYLLIUM IN ROCKET FUEL TO GIVE IT MORE UUMPH, MORE BOOST. THERE ARE NUMEROUS INSTANCES IN WHICH AMERICANS HAVE HAD TO DISCUSS IN A CLASSIFIED SETTING INFORMATION ABOUT SOVIET SCIENCE AND TECHNOLOGY THAT IS PUBLISHED BY THE SOVIETS IN OPEN SOURCE LITERATURE. TODAY WE SEE THE TREND OF OPENNESS ON TECHNOLOGICAL MATTERS ACCELERATING. THAT ACCELERATION IS ALSO CONNECTED WITH SOME STRUCTURAL CHANGES THAT ARE TAKING PLACE IN THE SOVIET UNION AND REPRESENT A PART OF PERESTROIKA. THIS IS THE GROWING IMPORTANCE OF DE-MILITARIZING THE DEFENSE SECTOR, AND REFERS TO THE NINE DEFENSE INDUSTRY MINISTRIES WHICH RANGE FROM THE MISSILE MEDIUM MACHINE BUILDING MINISTRY, TO THE MINISTRY OF RADIO ELECTRONICS, TO THE SHIPBUILDING MINISTRY, TO THE AVIATION MINISTRY, TO GET MORE AND MORE OF THEIR PRODUCTION CAPACITY DEDICATED TO THE OUTPUT OF CIVILIAN PRODUCTS.

THERE IS A CORRELARY TO THIS ROLE OF INCREASING CIVILIAN PRODUCTION FROM DEFENSE MINISTRIES, INCREASING FROM AN AVERAGE OF FORTY PERCENT TO AN AVERAGE OF SIXTY PERCENT OVER THE NEXT FIVE YEARS. THERE IS A GROWING AWARENESS BY SOVIET AUTHORITIES THAT THEIR STRONGEST AND MOST COMPETITIVE TECHNOLOGIES THAT CAN EARN THEM HARD CURRENCIES AND ESTABLISH A COMPETITIVE POSITION IN WORLD MARKETS IS DEFENSE RELATED TECHNOLOGY RANGING FROM SPACE POWER, TO ENERGY STORAGE, TO PULSE POWER SYSTEMS AND HIGH POWER MICROWAVE SOURCES, AND LASERS. THE SOVIETS HAVE BEEN RECOGNIZED AS LEADERS BY SPECIALISTS IN AND OUT OF GOVERNMENT.

IT IS MY VIEW THAT THE U.S. GOVERNMENT AND INDUSTRY SHOULD TAKE ADVANTAGE OF THE GROWING OPPORTUNITIES TO TAP INTO THIS ENORMOUS KNOWLEDGE BASE AND SOURCE OF SCIENTIFIC AND ENGINEERING TALENT AND APPLY IT TO OUR INDUSTRIAL AND RESEARCH NEEDS. THE SOVIETS RECOGNIZE THAT THEY HAVE A SURPLUS OF BRAINS AND MUCH

TECHNICAL TALENT. THEY LACK MECHANISMS, SYSTEMS, AND ACTUATORS FOR RAPID AND EFFICIENT UTILIZATION IN COMMERCE. THE UNITED STATES IS NO LONGER IN A POSITION WHERE IT CAN AFFORD TO IGNORE THE POTENTIAL FOR GAINING COMPETITIVE ADVANTAGES BY WORKING WITH THIS POWERFUL TECHNICAL BRAINPOWER RESOURCE.

SO, WHY SHOULD INDUSTRY TAKE ADVANTAGE OF SOVIET TECHNOLOGY? I THINK, IN THE CASE OF INDUSTRY, THE ANSWER IS OBVIOUS. IT TAKES ADVANTAGE OF SOVIET TECHNOLOGY FOR THE SAME REASON IT TAKES ADVANTAGE OF FRENCH, JAPANESE, ENGLISH TECHNOLOGY OR THE TECHNOLOGIES DEVELOPED BY AMERICAN UNIVERSITIES OR GOVERNMENT LABS. IF SOMEBODY HAS A BETTER IDEA, A CHEAPER WAY TO MAKE SOMETHING, A BETTER WAY TO PRODUCE A PRODUCT, TAKE ADVANTAGE OF IT; BUILD ON IT. IF SOMEBODY HAS ALREADY SOLVED THE PROBLEM, WHY RE-INVENT THE WHEEL? ALREADY OVER THE LAST FIFTEEN YEARS, AMERICAN COMPANIES HAVE BEEN TAKING ADVANTAGE OF SOVIET TECHNOLOGICAL ADVANCES. THESE INCLUDE COMPANIES LIKE MULTI-ARC VACUUM IN MINNESOTA, U.S. SURGICAL CORP. IN CONMNECTICUT, AND KAISER ALUMINUM WHICH HAS BUILT A LARGE ALUMINUM PROCESSING PLANT IN THE STATE OF WASHINGTON BASED ON RUSSIAN TECHNOLOGY. NEXT FALL, OUR COMPANY PLANS TO HAVE OPERATING A DEMONSTRATION SITE AT ALFRED UNIVESITY IN ALFRED, NEW YORK TO BRING TO THE U.S. THE OPPORTUNITY TO EVALUATE ADVANCED SOVIET MANUFACTURING TECHNOLOGY FOR MAKING HIGH PERFORMANCE CERAMIC MATERIALS.

WHY SHOULD THE U.S. GOVERNMENT BE INTERESTED IN TAKING ADVANTAGE OF SOVIET TECHNOLOGY? THERE ARE THREE REASONS THAT I WOULD LIKE TO MENTION. THE UNITED STATES GOVERNMENT, LIKE INDUSTRY, HAS A TREMENDOUS INVESTMENT IN R&D. IS THERE ANY REASON THE U.S. GOVERNMENT SHOULD BEHAVE ANY DIFFERENTLY FROM INDUSTRY? IF SOMEBODY HAS ALREADY SOLVED THE PROBLEM, DO WE WANT TO RE-INVENT THE SOLUTION? OR DO WE WANT TO RE-INVENT IT ON THE SAME SCALE? FOR STRATEGIC REASONS, WE MAY, INDEED, WANT TO MAINTAIN OUR RESEARCH BASE SIMPLY TO BE ABLE TO FOLLOW WHAT OTHERS ARE DOING. BUT DO WE NEED TO MAINTAIN IT AT THE SAME LEVEL IF THE SOVIETS HAVE

ALREADY SOLVED THE PROBLEM OF HOW TO GASIFY OR LIQUIFY SHALE, OR IF THE SOVIETS HAVE ALREADY FIGURED OUT HOW TO USE CERTAIN TYPES OF CHEMICAL REACTIONS TO PRODUCE ADVANCED CERAMICS, OR IF THE SOVIETS HAVE ALREADY BUILT HIGH-POWERED MICROWAVE DEVICES THAT WE ARE NOW STARTING TO BUILD?

ANOTHER REASON WHY THE U.S. GOVERNMENT SHOULD TAKE AN INTEREST IS TO TURN WHAT IS NOW A BLACK HOLE OF INTELLIGENCE GATHERING INTO A SOURCE OF COMMERCIAL OPPORTUNITY AND CREATIVE GOVERNMENT LEVERAGING OF A HUGE INFORMATION GATHERING EFFORT THAT HAS CURRENTLY ONLY ONE PURPOSE AND THAT IS TO IDENTIFY POTENTIAL SOVIET THREATS. WHAT I AM ALLUDING TO HERE IS THE HUGE INVESTMENT THAT THE DEFENSE DEPARTMENT, AS WELL AS THE INTELLIGENCE AGENCIES, IN READING SOVIET AND EASTERN BLOC OPEN SOURCE LITERATURE AND PIECING TOGETHER PICTURES OF WHAT THEIR STRENGTHS AND CAPABILITIES ARE. I KNOW THAT MANY OF THESE EFFORTS HAVE RESULTED IN IDENTIFYING SPECIFIC TECHNOLOGIES THAT HAVE DUAL USE APPLICATIONS THAT ARE NOT SIMPLY MILITARY THREATS BUT REPRESENT POTENTIALLY USEFUL INDUSTRIAL TECHNOLOGIES IF APPLIED IN A DIFFERENT WAY.

AN EXAMPLE IS MICROWAVE POWER. HIGH POWER MICROWAVE SOURCES CAN BE USED FOR DESTROYING WEAPONS OR FOR COMMUNICATIONS, OR FOR RADAR; BUT IT CAN ALSO BE USED FOR PITTING PRUNES, EXPLODING ORANGES, OR DRYING PAPER. I SUBMIT THAT THERE IS A TREMENDOUS CAPABILITY POTENTIAL TO TAKE A BODY OF INFORMATION WHICH IS NOW ONLY VIEWED AS POTENTIALLY THREATENING AND LOOK AT IT WITH A DIFFERENT SET OF LENSES AND VIEW IT AS REPRESENTING OPPORTUNITIES. OUR COMPANY IS CURRENTLY WORKING WITH NASA AND OTHER GOVERNMENT AGENCIES TO DO JUST THAT IN CONNECTION WITH SOME SOVIET SPACE RELATED TECHNOLOGY THAT OUR INFORMATION GATHERERS HAVE IDENTIFIED AS BEING UNIQUE AND FROM WHICH WE COULD STAND TO BENEFIT IF WE HAD WHAT THEY ARE ALREADY MAKING.

IN FIELDS RANGING FROM WELDING, TO LASERS, TO PULSE POWER, TO ADVANCED MATERIALS, THERE ARE MANY ACCOMPLISHMENTS WHICH THE SOVIETS HAVE MADE THAT WOULD ASSIST US IN OUR EFFORTS TO ADVANCE OUR OWN TECHNICAL, ECONOMIC AND COMMERCIAL INTERESTS. THE ACQUISITION OF SOVIET ACHIEVEMENTS DOES NOT HAVE TO BE DONE ON THE QUID PRO QUO BASIS OF "YOU GIVE US SOME OF YOUR KNOWLEDGE, AND WE'LL GIVE YOU SOME OF OUR KNOWLEDGE." WE KNOW THAT THE GOVERNMENT CAN ACQUIRE SOVIET TECHNOLOGY AND SOVIET ACHIEVEMENT IN THE SAME WAY INDUSTRY DOES. SIMPLY BUY IT AS A STRAIGHT, ECONOMICALLY ADVANTAGE EXERCISE. DON'T BUY IT AT ANY PRICE, OBVIOUSLY, BUT BUY IT AT A PRICE IS CERTAINLY NOT GREATER THAN WHAT IT WOULD COST US TO DO IT OURSELVES, PRESUMABLY LESS. IN THAT KIND OF APPROACH, THERE IS NO NECESSITY FOR US TO GIVE THEM ANY OF OUR INFORMATION UNLESS THEY WANT TO BUY IT OR UNLESS WE WANT TO SELL IT.

FINALLY, I THINK THE KIND OF INTERACTION THAT I CAN SEE OCCURRING BETWEEN THE U.S. R&D COMMUNITY AND THE SOVIET R&D COMMUNITY WOULD CONTRIBUTE SIGNIFICANTLY TO STRATEGIC STABILITY AND TO THE KIND OF SCIENTIFIC EARLY WARNING SYSTEM THAT WOULD ALLOW BOTH SIDES TO FEEL MORE COMFORTABLE WITH WHAT THE OTHER IS DOING. IN GENERAL, IGNORANCE BREEDS FEAR, WHEREAS KNOWLEDGE TENDS TO SUPPORT UNDERSTANDING AND A MORE ACCURATE ASSESSMENT OF INTENTIONS. THANK YOU.

OUTPOSTS

Every week in "Outposts," Outlook examines contemporary ideas that are changing our lives and expanding our intellectual frontiers. This week, John Kiser writes about recent Soviet research and development and how America can benefit from it. Kiser is president of Kiser Research Inc., a technology-transfer and venture company specializing in the Soviet bloc.

SOVIET SCIENCE

Moscow's Red-Hot New Technologies

By John Kiser

ALTHOUGH many Americans have become painfully aware of the technological progress of Asian and western Europe countries, smugness and wishful thinking are still blinding us to what we can learn from our chief political competitor—the Soviet Union. Its well-publicized economic problems have produced a widespread perception that that troubled country has neither science nor technology that would benefit the United States. This view is misleading at best. The Soviets in fact have the largest research and development base in the world. In our rush to sell goods to their product-starved citizens; we should investigate acquiring technological know-how from them that may benefit us. The best defense is still a good offense.

The apparent paradox of Soviet technical strength and economic weakness is an easily explained one. There is a difference between gaining knowledge and implementing that knowledge. Although the Soviet Union is a system with well-developed brainpower and excellent scientific education, it has a poor system of incentives for utilizing the output of its technical establishment, at least in the civil economy. Thus, while Soviet technological development, often directed at its defense needs, may not be commercially exploited and therefore not as visible as developments in the West, there are nevertheless impressive accomplishments. Furthermore, there are signs that under *perestroika*, Mikhail Gorbachev's policy of internal restructuring, the West may be able to acquire much more technology from the Soviet defense sector than has been available to it in the past. Coupling Soviet brainware—especially its most advanced dual-use technology—to American engineering and marketing will surely increase considerably the modest benefits we have been limited to in recent years.

What are some of the strengths of the Soviet R&D base? Considerable research has been devoted to almost every imaginable area of basic science.

In 1978, Edward Teller shocked a Washington audience by stating that "the U.S. has managed to keep ahead of the Soviets in only one technical field, electronics." From single-cell protein research to electronic materials, medical ultrasound, chemical catalysis, advanced materials, compact nuclear-reactor technology, lasers, pulsed power and advanced computer software, the Soviets have much to offer. The 1987 National Academy of Engineering Report points to the synthesis of fine-grained solids, composite materials, and rare earths as fields in which the Soviets are thought to be ahead.

Gallium arsenide, the highly touted new semiconducting material with high temperature and anti-radiation properties was first made in the Soviet Union before World War II. A reflection of their capabilities in electronic materials is evidenced by the fact that in the early '70s ITT was obtaining highest purity silicon and gallium arsenide, available in the world in large quantities, from the Soviet Union.

Picking the Soviet Brain

How do we gain access to this R&D base? There are two ways. The art of brainpicking is essentially that of reading other people's literature and talking to them. There is a huge Soviet technical literature base consisting of tens of thousands of books and hundreds of thousands of technical journals published every year, and many of these are being used to advantage by knowledgeable American engineers [see box].

The other way of tapping this R&D base is by direct research contracting. A number of companies have signed agreements with research organizations in the Soviet Union to pursue topics that look promising in the long term. These kinds of relationships both build on innovative Soviet approaches to problems and may provide U.S. companies with low-cost, high-quality scientific manpower.

Purchasing R&D talent may also offer an innovative answer to the buy-back problem that confronts companies seeking to sell products in the Soviet Union. Instead of buying products to offset sales, companies might hire dedicated researchers.

Another way to take advantage of the proprietary Soviet technology base is through direct commercial licensing of industrial products and processes. The Japanese steel industry has been a beneficiary of this process. Japan is an aggressive user of other people's technology. Kazuyuki Enami, of the Department of Materials Science and Engineering, Osaka University, concludes in his report entitled "The Technological Level of the Soviet Iron and Steel Industry" that "it is permissible to call the Soviet steel industry the most prominent and excellent 'laboratory' in the world steel industry."

Indeed, many important iron and steel process technologies that were further enhanced by Japanese industry originally came from the Soviet Union, such as the multi-layer steel cladding of pipe, blast-furnace cooling, continuous casting and electroslag remelting for making high-purity specialty metals.

Companies in Europe, Australia, South America have been licensing

Soviet technology processes, particularly those used in heavy industry. The Brazilians have a technology from the Soviet Union for making ethanol from wood. The Australians and British have purchased Soviet blast-furnace technology as well as technology for smelting lead and nonferrous materials. The United States has not been completely asleep. Significant new technologies have been introduced through licensing from the Soviet Union by Kaiser Aluminum, U.S. Surgical Corp., Air Products, Olin Brass, Multiarc Vacuum and others.

Original technology for the manufacturing of advanced ceramic materials by a method of controlled explosion—self-propagating high-temperature synthesis—is also being introduced here. This technology, developed in the Soviet Union over the past 20 years, is one which our government would not allow to be sold to the Soviets because of its dual-use applications. In this Soviet process of making advanced ceramic materials, all necessary heat energy is supplied by the combustion process itself. Thus, no external energy is required and unusual properties are obtained in the final product. Known in principle for years, this technology has been developed in the Soviet Union on a scale existing nowhere else in the world.

Further, the Soviets are using this technology to make large components up to three feet in diameter by a one-step process that synthesizes starting materials into a finished final product, known as "near net shape manufacturing. Neither the United States or Japan has this capability. U.S. government officials, astounded that this technology is being sold, regard this area of advanced ceramics technology as highly sensitive and subjects U.S. companies to export controls, even though the Soviets are way ahead of the U.S. in this field.

A Soviet Open Book

SPECIALISTS regard Soviet books, especially those having to do with industrial processes and manufacturing technology, as much more detailed and revealing than are American books on the same subject.

Glen Mcduff, an electrical engineer at Texas Tech University in Lubbock, teaches a course on high-power switching. His text is a Soviet book entitled "Pulsed Hydrogen Thyratrons," which he calls "the bible." Thyratrons are high-power electrical switches originally developed for radar but now widely used as switches for pulsed power applications. These can range from lasers to linear accelerators and ultrasound machines for breaking kidney stones. McDuff says there is no American equivalent to this book, which contains information not readily available in the West—design layout, material, everything related to thyratrons' electrical properties.

Eugene Riven, a Soviet emigre and machine tool specialist, now works with Soviet mechanical engineers to evaluate Soviet books for translation. He says that because of the absence of a commercially competitive environment, Soviet organizations are less inhibited in publishing details about processes which in the West would be considered proprietary. Joseph Wetch, president of a company that does satellite research and R&D for the Department of Defense, is constantly submitting proposals to the Defense Department based on ideas taken from Soviet literature in the field.

Tangible beneficiaries from "reading and listening" range from rocket propellent manufacturers in the United States, who now add toxic beryllium to fuel to enhance thrust, to DuPont, which changed its manufacturing technology for making a chemical intermediate, vinyl acetate. AT&T got the idea of using lasers to anneal semiconductor chips after hearing Soviet scientists give a lecture in Albany in 1977. The Electric Boat division of General Dynamics benefits from Soviet welding publications to improve the quality of American submarines. Thus, those companies that assume something can be gained from reading the Soviet bloc literature indeed frequently find valuable ideas and keys to problems whose solutions have been elusive.

—John Kiser

Who's More Secretive?

And this leads to a final reason for looking at the Soviet and Eastern European bloc technology base. Despite preconceptions to the contrary, the Soviets can be much more open and forthcoming about their technology than the West. According to Dick Spriggs, director of the Center for Advanced Ceramic technology at Alfred University: "The Soviets have shown a greater degree of openness about their ceramics technology than I ever expect from American companies."

The reason is that in the West, commercial competitive pressures lead many companies to adopt a policy of secrecy. So as not to show their hands to competitors, they keep articles and research unpublished. The same pressures frequently keep western companies from licensing technology to others. These pressures do not exist in the Soviet Union. The inability of Soviet organizations to effectively sell and market products in the West makes them more prone to license technology as the only way of getting a return on their investment.

Anecdotal evidence points to an extraordinary Soviet openness on many technical matters. Nor is this simply a phenomenon of perestroika. A former Army engineer who worked for the Defense Nuclear Agency in the early 1960s tells of a researcher from The Rand Corp. who was asked to gather all the information he could from Soviet open source publications about nuclear weapons effects in space. When he came back six months later with a report, the American side had to call a classified meeting.

More recently, in January, a Soviet delegation from the Kurchatov Institute in Moscow came to Albuquerque, N.M., to participate in a conference on space nuclear power. Their presentation included extraordinary details of their reactors which would otherwise be subject to classified treatment by the United States. Their openness, combined with new commercial imperatives, have even led them to offer for sale certain space products which have been of great interest to the United States.

- Behind the shabby appearance of Soviet technology and industrial capabilities, based on what one can observe on the streets of Soviet cities and stores, lies a powerful scientific infrastructure. While much of this infrastructure is bloated with scientific bureaucrats and unproductive research, and has become an object of self-criticism, Americans are invariably impressed by Soviet researchers. While the yield of Soviet research may be low and the number of organizations doing uninteresting work may be high, the Soviets' strengths can benefit the U.S. industrial community.

Welcome to the Candy Store

For many years, American laughed at Japanese products as cheap imitations and junk. Americans do not laugh any more. The Soviet industries cannot effectively compete in the international markets for manufactured commercial goods. Yet in many areas of industrial technology, tremendous know-how has been developed, even if poorly executed on the production line. Like the Soviets' T-34 tanks, their "crude" products have a way of doing the job. The U.S. government is aware of new Soviet technology in exotic areas of space power, nuclear power, explosion welding, high frequency radio wave generators, pulsed power devices and advanced ceramics manufacture. To date, the U.S. government approach has been to lean against the candy store window and dream of getting its hands on the goodies. Many of these goodies may be accessible now. We need only to walk through the front door.

Beyond the specific products and technologies we can obtain, greater trade with the Soviets will help us by altering our mindset about our relationship with other cultures. It has been said that the United States, in contrast to Japan, has lost its willingness to learn from other nations. Yet before World War II, America was in fact an avid learner. From physics to steelmaking, Europe was our teacher. America's strengths lay not only in mass-production technology, but in the rapid adaptation of other people's ideas.

However, the years of unchallenged U.S. global economic and political supremacy that followed World War II produced a self-congratulatory outlook unreceptive to learning what others may have to teach us. Being number one, American political and business leadership fell prey to a phenomenon which applies equally to countries and companies. As Harold Geneen, former CEO of ITT, characterizes it in his book, "Managing," "Every salesman, manager, engineer or member of an operating team is so used to thinking well of his own product, it is hard for any of them to recognize anything but the faults of his competitors."

This "we're number one" attitude has been debilitating to American competitiveness. As Europe and Japan recovered from the war, rebuilding their technological infrastructures and challenging the United States, we have continued to pat ourselves on the back rather than keep a close eye on our competitors' strengths. A little-publicized report published by the National Academy of Engineering in 1987, "Strengthening U.S. Engineering Through International Cooperation," clearly states that Americans must reacquire the willingness to learn from others. Rather than pull our technological wagons around in a circle to protect an ever-decreasing level of "superior" American technology, the report recommends "that the rate of knowledge acquisition from abroad be significantly increased."

The U.S. government needs to encourage those agencies trained to look for threatening Soviet technological advances to recognize as well the mutually-beneficial opportunities these developments pose.

REPORT ON THE POTENTIAL FOR TECHNOLOGY TRANSFER FROM THE SOVIET UNION TO THE UNITED STATES

by
John W. Kiser III

JANUARY 1980
2nd Printing

KISER RESEARCH
2029 WATERSIDE DR., N.W.
WASHINGTON, D.C. 20009

ACKNOWLEDGMENTS

I would like to express my appreciation to the numerous individuals in industry, government and academia, and to Soviet foreign trade representatives at Amtorg for their contributions to this report

Special thanks are due to Nicholas Grant of the Center for Materials Science and Applied Engineering, MIT, Nancy Nimitz of The Rand Corporation, Leon Shechter of Union Carbide, Roderick Scott of Perkin Elmer Corporation, Michael Boretsky of the Commerce Department, and Gala Zharikova of Licensintorg, for taking the time to read and comment on the draft manuscript.

PREFACE

This report has not been substantially revised since it was written for the U.S. Department of State in 1977. The only updating has been to add to the summary of licenses sold to the West (pp. 3-7) new agreements which have come to my attention.

The occasion for reprinting it is the publication of a sequel report about East European sales of technology to the West, also done for the Department of State. The numerous positive responses to this report from friends and acquaintenances in business and government has led me to promote the original for broad public consumption in conjuction with the new study. The two together provide a fairly comprehensive picture of technology transfer from the East Bloc to the West.

Certain details of the report, such as the status of some agreements, are no longer current. Nevertheless, I believe the basic information about the technologies sold to Western companies and the description of problems and prospects remain valid and useful.

It is possible as many as 8 or 10 new licenses have been sold to U.S. companies since 1977. I am personally aware of 5 new agreements — with 3M (2), J. R. McDermott, Olin Brass and Codevintec Pacific. These have been presented in the revised summary. Most recently, ICX of Washington, D.C. signed a multi-million dollar agreement to acquire the tooling and engineering documentation for building the Soviet YAK 40 air frame.

SUMMARY

Inquiring into the potential for technology transfer from the Soviet Union to the United States has presumed in advance that the Soviets have useful technology to offer. The purpose of this report has been to ascertain the extent to which this presumption was correct. Important to this exercise has been my effort to establish an historical record of Soviet sales of technology. Though the information presented in this report may represent a mass of information not generally known before, by any *objective* standard of measurement Soviet sales of technology to the U.S. and other industrialized Western countries have been miniscule. But the trend of their sales of technology, especially licenses, is rising sharply and I can see no reason why this should not continue.

By my estimation, the total dollar value of license fees paid by the U.S. is at most 13 million dollars, and perhaps another 1 million dollars has been paid in royalties. The largest royalty payments have probably come from the U.S. Surgical Corporation and Allied Steel and Tractor Corporation.

An approximate tally of sales to and purchases from the United States indicates that the Soviets have sold twice as many licenses (26) as they have purchased (13). However, this head count is crude because the Soviet figure is for agreements currently in force, whereas the U.S. figure is for total purchases since 1954, of which three have been abandoned and one is in abeyance. Furthermore, the comparison does not reflect purchase agreements negotiated by Licensintorg, but which subsequently were not approved by the U.S. Export Control Administration. Finally, the price paid for individual U.S. licenses has been roughly estimated by Licensintorg as 10 times greater than the price paid by American firms for Soviet licenses. This means that whereas U.S. firms may pay on the average between 300 and 500 thousand dollars, the Soviets pay closer to 3 to 5 million dollars on the average for U.S. licenses. The difference in average price is said by the Soviets to be due to the larger amounts of equipment which accompany Licensintorg's purchases of know-how and to the larger projected market.

When the total amount of equipment relative to know-how is very large, the Soviet purchases are made by the foreign trade organization which specializes in that line of product. For this reason, the balance sheet with Licensintorg provides an incomplete picture, as it excludes the enormous transactions involving chemical plants, truck assemblies and other large turnkey contracts in which U.S. firms have had a part.

More interesting than comparative magnitudes has been trying to understand why Soviet sales of technology have not been greater. I am of the view that Soviet performance of selling technology abroad parallels their performance internally. That is, the reasons for a poor showing on the international market are related less to the availability of useful technology to sell and more to their system of incentives (lack of selling mentality), organizational structure (extreme fragmentation among virtually autonomous units whose activities require coordination), and scarcity of qualified personnel for carrying out the job (uneven quality of management; Licensintorg is spread very thin and generally does not seem to be a high priority in Soviet foreign trade efforts). All these problems have their analogues within the Soviet economy as a whole which affect the transfer of their own scientific and technical know-how into actual industrial practice.

For this reason, the potential for increased technology transfer is heavily dependent on the ability of the Soviets to organize themselves to sell more effectively and to make buying less difficult. But the potential is also dependent on Western perception of opportunities. Because the Soviets aren't "sell" oriented, Westerners can't depend on the Soviets to bring to their attention things they ought to be interested in buying.

To the extent the perception of opportunities affects technology transfer from the USSR, it is my belief that there are numerous political, cultural and analytical biases which can lead to underestimating Soviet technological capabilities and hence the potential for reverse technology flow.

Each of these categories of bias — political, cultural, analytical — should be subject to separate treatment, but buried in all of them seems to be a general societal preference for looking at the weaknesses and shortcomings of the Soviet Union. Because most Americans don't like the Soviet system of doing things it is natural to write about what is wrong with it. This helps reinforce our view that it's a lousy system. Furthermore, to write about positive features of their system can carry the risk of being considered an apologist. However, because the USSR is our principal ideological adversary it strikes me as more important to know what is good about their system; where and when it does function well; its successes and achievements. Only by being conscious of our understandable ideological preference for seeing the system's defects can we counteract the danger of misjudging just how bad things are.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. There is considerable potential for increasing the amount of technology transfer from the USSR to the United States, but the inhibiting considerations are not very controllable by the U.S. government, or for that matter, by the Soviet government. Important limiting elements are the organization of the Soviet sales effort, together with a general lack of salesmanship on their side and widespread negative perceptions of opportunity among U.S. industry on our side.

   a. In certain areas, the time and money required to learn of and evaluate potentially useful technology in the Soviet Union may be excessive given other pools of technology available in the U.S. or Western Europe. However, widely prevailing negative attitudes often preclude learning of Soviet technology. The assumption that little is there of use to the United States, or that if good technology does exist the Soviets wouldn't reveal it, inhibits looking and hence finding anything.

   b. Viewed in the broadest terms the comparative advantage of Soviet technology lies with its large basic and applied research capability. While their innovation process is beset with difficulties, one should be careful of stereotyping and not overlook the diversity, variability and flexibility which seems to exist within their system.

   c. Extreme unevenness and erratic performance is characteristic of much Soviet technology. For this reason it is easy to be misled and dangerous to generalize about their capabilities. Much ultimately depends on administrative priorities as their system doesn't seem to provide natural incentives which lead to technological evenness.

2. It would be constructive for analysts in general to devote greater attention to trying to find out about what works well in the USSR, especially as it relates to technology, innovation, institutional behavior and other matters affecting our perception of Soviet reality. Exploiting Soviet technology is not going to be furthered by emphasis on what is wrong with their system.

Recommendations

1. The US-USSR Bilateral Exchanges are providing hundreds of American scientists a great deal of exposure to what the Soviets are doing in a wide variety of areas. It would be a great waste if the knowledge and experience which is being accumulated were dissipated. This information could be used both to improve our assessment of where the Soviets stand in particular fields and to assist elements of the private sector in identifying areas of potential benefit. Some of the concrete bits of information which should be gathered might include:

   a. Names and locations of Soviet specialists who have made strong impressions on U.S. participants.

   b. Names and locations of research centers which appear to be doing high caliber work.

e. Catalogue of specific areas of research and development in which the Soviets appear to be advanced.

d. Catalogue of the most frequently encountered problems and difficulties experienced; description of successful efforts to cope with them.

e. Development of guidelines for dealing with the Russians which could be helpful to future exchange efforts either in the public or private sector.

Information of this kind should be organized and centralized in such a manner as to be easily available to firms in the private sector interested in finding out about Soviet technology. This kind of information could be particularly helpful to companies with Science and Technology Agreements, especially those whose prior experience with the Soviets is minimal or non-existent.

More broadly, information could be gained from these contacts which would add to a general understanding of organizational relationships, economic behavior, decision making processes, technological capabilities, the manner in which Soviets approach the solution to problems, and a vast array of other subjects relevant to the intelligence, academic, business and political communities.

One might question the usefulness of technical people to contribute to an understanding of these various non-technical issues. The technical people I have spoken with are thoughtful, observant of the broader environment they go into, and often have very useful insights gained from their personal experiences.

2. Systematic monitoring of Soviet, and perhaps East European, technological developments in the civilian sector and especially of commercial activity involving transactions of the kind described in this report should be institutionalized. Such monitoring could be punctuated every three or four years with an in-depth study similar to this report aimed at finding out whether recipients of Soviet technology have successfully commercialized their licenses and whether the Soviet *modus operandi* has changed or improved.

If the results of such monitoring are properly organized and easily accessible to interested parties, the information could serve a variety of commercial, political and intelligence interests. A somewhat similar recommendation has been made by a Rand report (C. Wolfe, "U.S. Technology Exchange With The USSR: A Summary Report", August 1974, R-1520/1ARPA).

INTRODUCTION

This report provides information about technology the Soviet Union has sold to the United States and other Western countries in recent years. In addition, it discusses related institutional aspects of Soviet sales of technology and concludes with an assessment of the potential for increased technology transfer in the future.

APPROACH

(1) The report draws upon information, experiences and points of view from individuals in the following categories:

- Persons who have been involved in the purchase of a license from the USSR.
- Intermediaries, especially patent lawyers and foreign sales representatives of Soviet trading organizations.
- Technical specialists in government, business and academia with knowledge of Soviet developments in particular fields.
- Soviet trade representatives at Amtorg.

The approach has been investigative. I have sought hard information about Soviet civilian technology which has been sold to developed Western countries, as well as interesting technology currently being marketed. As a result, I have spoken primarily with technical people and businessmen actively interested in, or recipients of, Soviet technology. It is their technical judgments and experiences with Soviet organizations that form the basis of this report.

(2) This report also emphasizes the specificity ot technology. On the popular level we have been caught up in talking very generally about the "technology gap". The question which must be asked whenever the term "technology gap" is used, is - gap where? In what? In consumer goods, or in producer goods? In heavy industry or light industry? In food processing, ship building, public transportation, computers, or steel making? If computers, are we talking about a gap in hardware or software? If software, are we talking about computer language, applications programs or operating programs; or are we talking about the organization of all these things? Further, are we talking about product design technology (laboratory and prototype development) or manufacturing process technology?

In addition, is one comparing general levels throughout an industry or is one talking about the highest individual level of practical achievement? Which is most relevant from the standpoint of technology transfer? By one criterion the Soviets may be ahead, by another behind. Their general level in a given industry may be below ours, but the level of technology indicated in a specific plant, installation or device, higher. Since this is a report about technology transfer, it is specific. General levels of technology are not transferred, only specific, individual technological achievement.

(3) The specificity of the technical material presented is in the context of the marketplace. What are the technical advantages of a product or process which make it commercially appealing? Two experts can go to the USSR and see turbines. Both can return with opposing views about the quality of Soviet turbines. Based on what each saw, each expert can be right. The problem of conflicting expert opinion derives from different access to Soviet technology and extreme technological unevenness as well as different criteria for evaluation. Further, is a favorable judgment favorable relative to the expectations of the observer, which are often very low, or favorable by any standard of comparison?

Some of these questions and problems are eliminated by using the marketplace as a criterion, although other problems take their place which will be discussed in the body of the report. Rather than seek views about comparative levels, the questions have been: (a) what technology do the Soviets have for which Western companies have paid money, and (b) what do the Soviets have for which Western firms may be prepared to spend money? The implication is not that the Soviets have achieved the highest state of the art or have the "best" because they sold a particular technology, but that the purchasing firm sees an economic benefit for itself and its customers. In a number of instances, however, the technology sold by the Soviets does seem to represent technically significant advances. In any event, to be successful, Soviet technology must be competitive with that which exists in the marketplace. For those who want to know what technology the Soviets have to offer the West, this report gives some answers from the marketplace.

(4) In the appendices are the talking points used for organizing loosely structured discussions with people who have different types of relationships with the Soviets. I rarely covered all the questions thoroughly with any one individual. All were told that what they said was for an unclassified report which might be read by their competitors or by the Soviets. The limits of self-censorship for competitive or other reasons seemed to vary greatly among firms. The nature of the technology, patent protection, stage of

utilization, individual and firm personality all seemed to play a role in the openness of people with whom I spoke.

Sensitivity was encountered mainly in two areas. Companies sometimes feared jeopardizing their business relationship with the Soviets by saying negative things or by being critical of Soviet methods. These firms were told no attribution would be made, and that questions relating to the Soviet *modus operandi* would be treated in general terms. Second, for competitive reasons, firms would sometimes reveal little about the nature of the technology purchased or in which they had an interest. On the other hand, certain firms obviously saw this report as a vehicle for getting some free advertising for their technology.

(5) There can be many different approaches to analyzing the level of Soviet technology in a particular field. This project is not aimed at making any assessments of Soviet technology *per se*; rather it creates the beginning of an information base about Soviet commercial transactions involving technology. To the degree the information about technology sales to the West is new, I believe it will add another dimension to the efforts of those whose job is to analyze the state of Soviet technology. For members of the business community this report may alert them to opportunities available, as well as to problems to be anticipated when trying to buy Soviet technology. For individuals deliberating about the role of trade and technology in U.S.-Soviet relations, this report may provide useful new information.

SCOPE OF TECHNOLOGY COVERED

Technology is a term about which there is little definitional agreement. Where the line between science and technology is drawn varies with the perspective of the individual whose opinion is sought. One scientist, a metallurgist, has described technology as referring to any body of systemitized, verifiable information which can be transferred. Another scientist, in charge of corporate R&D, defines technology as occurring whenever an application for scientific knowledge can be identified. Yet another scientist says that for his specialty, welding, technology is defined somewhat arbitrarily as process engineering and manufacturing know-how. It is not my purpose to try to develop a definition of technology which will make everyone happy. Nevertheless, the definitional question does affect the perception of opportunities which exist for technology transfer from the USSR. It should be noted that American firms have purchased Soviet technology ranging from the conceptual to the industrially proven.

The technical portion of this report contains two kinds of information. These are (1) information of an historical nature, and (2) information about technology currently of interest. The first category relates to the creation of an information base that attempts to document the extent of past Soviet sales of technology in the U.S. and in other developed Western countries. Under the category of technology sold is included "disembodied" technology, transferred by the sale of licenses and "embodied" technology in the form of exports.

Although there are various exceptions which will be discussed in the body of the report, a license agreement is usually made in order to be able to do something more cheaply or better than before. The motive is generally to acquire a technical benefit that will yield an economic advantage to the user. Hence, I have included all license information for the record. Deciding whether or not to include an exported item as an example of technology transfer can be more difficult. My criterion, however, has been to establish that an item imported from the Soviet Union was acquired not as a result of a favorable price or adverse domestic supply conditions, but because of a technical advantage over what was available in the U.S. at the time. However, sometimes a product with a technical advantage may be introduced or gain acceptance because of favorable price or supply conditions. As a result, I have made judgments of my own on this.

For example, Soviet synthetic diamonds imported by Harry Baumgold of New York City are said to have good technical characteristics (friability, g ratio, shape) but overall are not thought to be any better than those produced by General Electric. However, they are cheaper. Other products which I encountered but decided not to include in Part One were much such things as ordinary school microscopes, tracters, resisters, 3 phase asynchronous motors, linotype presses (to FRG), Lada automobiles and certain types of machine tools. Most of these items were reported of good quality, but did not appear to represent anything special in terms of technology.

On the other hand, Quant 9 laser drills were mentioned because they are said to have technical advantages over competitive drills in addition to being cheaper. (See Sect. VI 3(e) of Part One).

With respect to (2), technology of interest to U.S. and other Western firms, I am including the following: (a) licenses being offered reported to be of interest, (b) exports, using the same criterion as indicated above, and (c) areas of technology reportedly of interest based on conversations with business, academic and government people who are engaged in technology exchange or have other relationships with the Soviets which give them a knowledge of what they have accomplished in specific areas. In connection with (c), I have had no clear standard for determining what to report. In some instances the technology brought to my attention appears still to be in a developmental stage such as diffusion bonding of heterogeneous materials or the use of enzymes for photography.

In choosing to include information about technology of interest to American firms, one important caution needs to be made. I have not been able to devise any reliable method for distinguishing between different levels of interest. I can only say that they range from requests for additional information to serious negotiation. Firms may show interest only in order to keep their files updated. The Soviets, on the other hand, are known to use the term "negotiation" rather loosely. I have tried to indicate in my descriptions the degree of interest as it has been made known to me.

TABLE OF CONTENTS

SUMMARY iii
CONCLUSIONS AND RECOMMENDATIONS v
INTRODUCTION vii

PART ONE. SOVIET TECHNOLOGY TRANSFER TO THE INDUSTRIALIZED WEST

I. INTRODUCTION 1
Summary of Licenses Sold 3

II. CHEMICALS 8

III. ENERGY 10

IV. ELECTRONICS 13

V. FOOD/AGRICULTURE/NUTRITION 14

VI. SCIENTIFIC INSTRUMENTS/MEASURING AND TESTING APPARATUSES 15

VII. MACHINERY AND EQUIPMENT 20
A. Textile Equipment 20
B. Excavation, and Building Related Technology 20
C. Miscellaneous 22

VIII. MEDICINE 25
A. Medical Devices/Equipment 25
B. Pharmaceuticals 27

IX. METALLURGY 28
A. Welding and Other Fabrication Technologies 28
B. Iron and Steel 31
C. Non-ferrous Metallurgy 34
D. Process Engineering 37

X. MINING 39

XI. TRANSPORTATION 41

XII. ENVIRONMENT 42

PART TWO. INSTITUTIONAL ASPECTS OF SOVIET TECHNOLOGY SALES

I. FROM INVENTION TO EXPORT 43

Patents Versus Certificates of Invention in the Soviet System 43
The 1965 Paris Convention for the Protection of Industrial Property 44
Process of Applying for Foreign Patent Protection 44
Selecting Technology to License 44
Methods for Selling Abroad 45
Export Control 46
Mechanisms for Technology Transfer 47

Table of Contents (Continued)

Two Case Histories 48
Perkin Elmer Corporation 48
Codevintec Pacific, Inc. 48

II. EXPERIENCES WITH THE SOVIETS AS LICENSORS 50

III. LICENSING VERSUS EXPORT 53

IV. MOTIVES OF SOVIET LICENSEES 54

V. CONSIDERATIONS WHICH INHIBIT THE SALE OF SOVIET TECHNOLOGY 56

VI. "FAILURES" OR VARIOUS REASONS FOR UNSUCCESSFUL EXPLOITATION OF SOVIET TECHNOLOGY 58

Abandoned Licenses-Various Reasons Why This Can Occur 58
Reasons Why Interesting Technologies Marketed Were Not Sold 59
Failure in the Marketplace 60
Andco Corporation-Evaporative Stave Cooling of Blast Furnaces 60
Kaiser Resources Ltd. (KRL)-Mitsui Mining-Soviet Ministry of Coal (A Joint Venture) 62
Energy Sciences, Inc.-Electronic Beam Gun 63

PART THREE. PERSPECTIVE AND ANALYSIS

I. PERSPECTIVE 65

Macro Perspective 65
Micro Perspective 65
Exhibit 1 - Summary Information About License Sales to the United States, 1954-1976 67
Exhibit 2 - Overview of U.S. and Canadian Firms Which Have Purchased Licenses from the Soviet Union 1954-1976 67
Other Aspects to the Question of Significance 69
Technical Significance 70

II. ANALYSIS OF THE POTENTIAL FOR TECHNOLOGY TRANSFER FROM THE USSR TO THE U.S. 71

Exhibit 3 - Basic Phases of Technology Cycle 72

GENERAL BIBLIOGRAPHY 76

SOURCES OF INFORMATION ON SOVIET TECHNOLOGICAL DEVELOPMENT OF CURRENT OR POTENTIAL COMMERCIAL INTEREST 77

APPENDIX

1. SOME INSTITUTIONAL SOURCES OF SOVIET TECHNOLOGY SOLD OR BEING OFFERED IN THE WEST 78

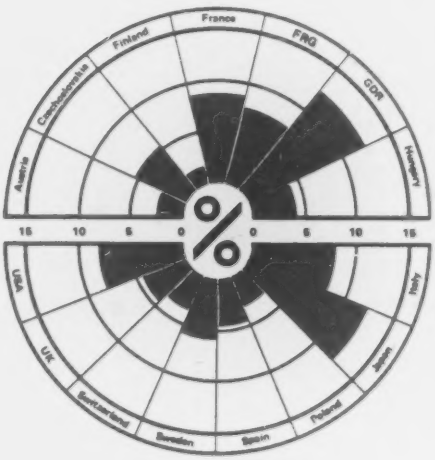
PART ONE. SOVIET TECHNOLOGY TRANSFER TO THE INDUSTRIALIZED WEST

I. INTRODUCTION

1. ***Completeness*** It is important for the reader to keep in mind that, as an information base, the material presented in this part of the report is far from complete. This incompleteness relates to all three major components - licenses sold, exports embodying high technology, and technology of interest.

The chart below represents the distribution of Soviet license sales by country. Since I know at least 26 licenses have been sold in the U.S. (my guess is that I have missed three or four at most) one can extrapolate from the graphics and come up with a very rough figure of 300 licenses sold worldwide by Licensintorg since 1962. I have varying degrees of information about 116 licenses.

Share of the following countries in purchasing licenses for Soviet inventions:



Source: "Soviet Technology & Engineering Digest " 1976, p. 23

My information about exports is also incomplete, although I have no particular feel for how incomplete it is. For example, an area which I neglected was Soviet sales of machine tools. It was my impression that the majority of these sales represent counter-purchases by Western sellers of machine tools. Nevertheless, some of their exports, such as the 65,000 ton hydraulic stamping press to Creusot Loire, are apparently very impressive pieces of equipment.*

Export data does not permit qualitative distinctions between machinery and equipment which represents ordinary technology, such as tractors and school microscopes, and those items which represent sophisticated technology, such as the differential scanning microcalorimeter or the K 355 flash butt welder. Since I have encountered relatively few straight exports which are viewed as representing advanced technology, I have concentrated my efforts on "disembodied" technology sold in licensing agreements.

Concerning technology of interest to U.S. and Western firms, this subject has virtually limitless potential for investigation. What I have presented under this category is merely a small sample.

2. ***Sectoral Presentation*** There follow 10 sectors - chemicals, energy, environment, electronics, mining, metallurgy, medicine, machinery and equipment, food and nutrition, transportation. Under each sector I have summarized information about (1) licenses sold, (2) exports, (3) areas of interest.

It is important to keep in mind what these sectoral presentations *do not* represent. They do not represent an overall analysis of Soviet levels of technology in those sectors, nor an attempt at a balanced consensus of Soviet accomplishment in these fields. For the most part, the information represents commercial facts along with varying degrees of explanatory detail.

Last, it would be unwise to draw any firm conclusions about Soviet technological strengths based on the distribution of information among sectors found in this report. One should not assume that what isn't there does not exist. I am acutely aware of the superficial nature of this survey, particularly as it relates to new Soviet technology currently of interest to Western

*According to Mr. Lapato, Director of French Machine Tool Association

firms. The information contained in this report reflects the sources I have been able to cultivate more than anything else. For example, the section on electronics is very thin. Just a few weeks before going to press I received from the Soviets a list of over two hundred electronic-related technologies which they are just beginning to market. These include technologies for such things as radioisotope ice warning indicators, semi transparent photomasks, microplasma welding installations, methods for applying carbide and silicide coatings to diamond powders and many others. Six months from now there could be a large section devoted to Soviet electronics technology of interest to U.S. firms. The same could be true of many other areas.

3. *A Comment On The Use Of Soviet Sources.* As a rule I have made a point of including only verifiable information. This does not mean that in every case I have verified transactions reported in Soviet literature, but I only cite *Soviet Export* or other Soviet sources if they give the name of the licensee and hence are capable of corroboration. I think it would be silly to exclude these valuable sources of information, since I have had occasion to check many of their references and they are overwhelmingly accurate, at least as to *the fact* of the transactions. The glowing accounts of performance must naturally be viewed skeptically. Nevertheless, I have used their descriptive information and performance data for items purchased or of interest to U.S. companies, but for which I have no other source of information.

I have used Soviet contacts among their foreign trade organizations in New York as sources of information about technology of interest to U.S. firms. This is for the obvious reason that they are in the best position to know. Furthermore, from U.S. sources I have had either prior or subsequent corroboration that technologies the Soviets told me were of interest to U.S. firms were so. At least four examples of technology being marketed which they claimed were of interest to U.S. firms - technology for manufacture of synthetic diamonds, external desulphurization of pig iron, plasma arc remelting, turbo cooling equipment - I knew about independently. The difficulty in obtaining more than chance corroboration lies with the frequent Soviet commitment to confidentiality in their relationships with interested U.S. companies.

4. *A General Comment on Technology.* While reading Part I it should be kept in mind that rarely is there only one way to do something and the path one takes is governed by many considerations - cost of other technological alternatives, size of capital investment in current technology, historical or technical factors which led to going a certain route, institutional and personal ego, etc. Also what may be best in one situation may not necessarily be best in another.

In general, technology evolves to meet certain needs, whether brought about by the marketplace, by the physical environment, or by government regulation. The particular technical solution chosen to meet these needs may be a compound of the different factors mentioned above, but economics is presumably a dominant one, at least in our system. However, technological requirements change because of new needs or demands placed on industry. As a result we may find that these requirements correspond to those for which the Soviets, or someone else, have already developed technologies - as with aluminum production from non-bauxitic ore, *in situ* coal gasification, shale oil extraction, hydraulic mining, UHV power transmission, etc.

We may also find that a particular solution to a past problem may become less desirable than an alternative one developed to meet a similar requirement. For example, both vacuum arc remelting and electroslag remelting are methods for secondary refining of steels. For a variety of historical and technical reasons the U.S. went predominantly the route of vacuum arc remelting and the Soviets the path of electroslag remelting. While both technologies have their advocates in the U.S., it does seem to be accepted that ESR is a superior technology for removing sulphur impurities, though vacuum arc is considered superior for working with titanium. As the demand for higher quality steels increases so also does the applicability of ESR as a way of achieving desired levels of metallurgical purity which, in turn, affect equipment performance.

Furthermore, the U.S. has no monopoly on good brain power. Scientists and engineers in all countries are working on ways to do things more economically and more effectively. The Soviets with their large scientific and technical establishment should be expected to come up with new approaches, new applications of old principles, cleverer designs and an occasional scientific breakthrough, even allowing for their fair share of mediocrity. The particular areas in which technological progress is most evident should correspond to those which have had a high priority in R&D planning.

Last, it should be recognized that technology transfer, certainly between the technically advanced countries, involves incremental improvements over existing technology. The size of the increment may vary in significance, but nothing is totally new nor does any of the technology involve something we couldn't do ourselves if we wanted to spend the time and money to do it. However, not to share in the achievements of other nations' technology only means costly reinventing of the wheel.

The discovery of a new scientific principle whether represented by the atomic bomb, transistor, or laser is quickly made known throughout the world scientific community. Scientists, like businessmen, know what everyone else is doing in their respective fields and when a breakthrough occurs it is quickly made known. The difference in levels of technology relate to the efforts of scientists and engineers to develop commercial applications and accompanying hardware which are industrially reliable and economic.

SUMMARY OF SOVIET LICENSES SOLD TO WESTERN FIRMS

Key:
dk = don't know
(?) = educated guess

I. METALLURGY

Welding & Fabrication Technologies	*Date*	*Firm(s) Which Purchased License*	*Status*
● flux cored electrodes	1966	Messer Griesshelm (FRG)	Commercialized
	1970 (?)	Trefileries et Atelier de Commercy (France)	Commercialized
	1973 (?)	Chemetron Corp. (U.S.A.)	In development
● rotary arc welding	1968	Messer Griesshelm (FRG)	Abandoned
● electroslag welding	dk	Alsthom Atlantique (France)	dk
● magnetic impact bonding	1974	Maxwell Laboratories (U.S.A.)	In Marketing
● bimetallic rolling	1974	Aschenbach Buschhutten (FRG)	Commercialized
● ball mill (continuous process for making ball bearings)	1976	Fagester Bruks (Sweden)	dk
● HPTR cold rolling mill	1972 (?)	Patent Management (U.S.A.)	Commercialized
	dk	Mannesman (FRG)	dk
	dk	Kobe Steel (Japan)	Commercialized
	dk	Sandvik (Sweden)	Commercialized
	dk	Innocenti (Italy)	Commercialized
● air plasma cutting	dk	Esab (Sweden)	Commercialized
● continuous flash butt welding of large diameter pipe	1979	J. R. McDermott (USA)	In development
Process Engineering			
● chill casting process	dk	Sinto-Kogio (Japan)	dk
● shell moulds for investment casting	dk	Rolls Royce (England)	Commercialized
● fluid self-hardening moulding mixtures	1964 (?)	Sodiprom (France)	dk
	1966	Heppinstall (U.S.A.)	Abandoned
	dk	Nippon Chuzo (Japan)	dk
● microscalper	1973	Fenn Manufacturing (U.S.A.)	Commercialized
	1973	Kieserling & Albrecht (FRG)	Marketing phase
	dk	Sinto-Kogio (Japan)	dk
● MIR extrusion cutting machine	1970	Demag (West Germany)	Abandoned
● electrohydraulic cleaning of castings	dk	Tellus Maskin (Sweden)	Commercialized
	1976 (?)	Mitsubishi Motors (Japan)	In development
● radial forging	dk	Bultan Kantal (Sweden)	dk
● method of rolling and drawing	1977 (?)	Schloemann-Siemag (FRG)	dk
● method of induction tipping of working parts	1978 (?)	Kobashi Kogyio (Japan)	dk
Ferrous Metallurgy			
● continuous casting of steel	1969 (?)	Creusot Loire (France)	dk
	1970 (?)	Kobe Steel (Japan)	Commercialized
● electroslag remelting	1970 (?)	Creusot Loire (France)	dk
	1970 (?)	Ulvac (Japan)	dk
	1973	Cabot Corp. (U.S.A.)	In development
	1973	Avesta (Sweden)	Commercialized
	1975	SKF (Sweden)	In development
	1976	V.E.W. (Austria)	dk
	1976	British Steel (England)	dk
● evaporative stave cooling of blast furnaces	1969	Gutehoffnungshutte (FRG)	Commercialized
	1972	Andco Corp. (U.S.A.)	Commercialized
	dk	De Lattre Lavivier (France)	dk

SUMMARY (CONT'D)

Ferrous Metallurgy	*Date*	*Firm(s) Which Purchased License*	*Status*
	dk	Davy Ashmore (England)	dk
	dk	Broken Hill (Australia)	dk
	dk	Nippon Steel (Japan)	Commercialized
● dry coke quenching	dk	Italimpianti (Italy)	dk
	dk	Nippon Kokan (Japan)	dk
	dk	Altos Ornos (Spain)	dk
● gas cupola	dk	Italian firm	dk
● graphite moulds for titanium castings	dk	Fratelli Arsenigo	dk
● vertical continuous pouring of steel	1978 (?)	Danielli Spa (Italy)	dk
Non-Ferrous Metallurgy			
● asymmetrical bus bar arrangement	1972	Alcan (Canada)	Commercialized
	dk	Nippon Light Metal (Japan)	dk
● electromagnetic casting of aluminum	1974 (?)	Reynolds Aluminum; (U.S.A.)	In development
	1975	Kaiser Aluminum (U.S.A.)	In development
	1974	Alusiusse (FRG)	In development
	dk	Mitsubishi Chemicals (Japan)	dk
		Pechiney (France)	dk
● beryllium free copper alloys	dk	Metallgesellschaft (FRG)	Abandoned
● diaphragmless electrolyers for magnesium extraction	1971	American Magnesium Corp. (U.S.A.)	Commercialized
● process for making aluminum from alunite ore	1974	Alumet Corp. (U.S.A.)	In development
● process for making silicon aluminum alloys	1973	Ethyl Corp. (U.S.A.)	In development
● Kivcet copper smelting process	1974	Kloeckner-Humbolt-Deutz (FRG)	Marketing phase
● vacuum technology for producing ultra pure lead and tin	1974 (?)	Estano Electro (Mexico)	dk
	1974 (?)	Norodeste (Spain)	dk
● oxygen free continuous casting of coppe	dk	Continuus (Italy)	dk
● continuous casting of copper wire rod	1977	Asea (Sweden)	Commercialized
● electromagnetic casting of copper	1978	Olin Brass (USA)	In development

II. CHEMICALS

Processes	Date	Firm(s) Which Purchased License	Status
● process for continuous production of phenol-formaldehyde resins	1969	Vereinigte Chemische Fabriken A.G. (An Austrian firm recently acquired by Perstorp of Sweden.)	Commercialized
● process for making isocyanates	1972	Gottfried Reuter Holding (FRG)	In development
● production of synthetic fatty acids through oxidizing paraffins	dk	Ajinomoto Company (Japan)	dk
● process for making hydrogen peroxide by the anthroguinone method	dk	A Swedish firm	dk
● process for production of foam phenoplasts	dk	G.A. Serlachius (Finland)	dk
● process for splitting oligomers of Nylon 6	1974	Zimmer A.G. (FRG)	Commercialized
● process for making polycarbonates	1974	Montedison (Italy)	dk

SUMMARY (CONT'D)

• process for making high pressure polyethylene	1975	Salzgitter (FRG)	In development
• process for making ion exchange granules	dk	Dia Prosim (France)	dk
• process for making anti-oxident, Agidol-1, using a phenol base	dk	Montedison (Italy)	dk
• technique for production of alpha ramified carboxylic acids for making high quality paints & resins	dk	Gottfried R. Holding (FRG)	dk
• production of fiberglass insulation "Steklopor"	1978 (?)	VIC (Italy)	dk
Products			
• ASP anti-friction plastics	1971	Gottfried R. Holding (FRG)	Abandoned
• rotary film evaporator	1972	Gottfried R. Holding (FRG)	In development

III. MEDICINE

Devices	*Date*	*Firm(s) Which Purchased License*	*Status*
• surgical staplers	1964	U.S. Surgical Corp. (U.S.A.)	Commercialized
• total titanium hip prosthesis	1971	U.S. Surgical Corp. (U.S.A.)	Commercialized
• surgical staplers	1978	3M (USA)	In development
Drugs			
• Ethnozin for cardiac arrest	1974	Dupont (U.S.A.)	In development
• Pyrroxan, for central nervous system disorders	1974	American Home Products (U.S.A.)	In development
• Ethyminole, a respiratory analeptic	1973 (?)	Roger Bellon Laboratory (France)	dk
• Lutenurin antitrichomonal and contraceptive	dk	Fraysse and Ucepha Labs (France)	dk
• insect repellant	1975	American Home Products (U.S.A.)	In development
• Ftorafur, anticancer drug	1976	Bristol-Myers (U.S.A.)	In development
• Prospidine, anticancer drug	1976	Bristol-Myers (U.S.A.)	In development
• option for carminomycin, anticancer drug	1976	Bristol-Myers (U.S.A.)	In development
• nonakhlazine	1978	British firm	In development
• technology for production of lupin seeds	1978	British firm	In development
• pharmaceuticals	1978	3M (USA)	In development

IV. ELECTRONICS, INSTRUMENTATION, MEASURING DEVICES

• system of pneumatic elements for industrial automation	1968	Prodest Elettronica (Italy)	dk
• process for manufacturing high precision printed circuit board resistors	1968	H. W. Sullivan (U.K.)	Commercialized
• device for measuring electrostatic charges	1969 (?)	N. V. Tools (U.K.)	dk
• cast microwire insulated in solid glass	1971	Gottfried Reuter Holding (FRG)	In development
• Chrona V2 zinc air cell (9 volts)	1970 (?)	Leclanché (France)	dk

SUMMARY (CONT'D)

● electron beam accelerator	1973 1971	Energy Sciences, Inc. (U.S.A.) Gottfried Reuter Holding (FRG)	In development In abeyance
● graphite furnace accessory to atomic absorption spectrometers	1975	Perkin Elmer* (U.S.A.)	Commercialised
● sheetmaster-card counting device	dk	De La Rue (U.K.)	dk
● method for growing monocrystals of corundrum from the melt	dk	Toshiba Ceramics (Japan)	dk
● electroimpulse de-icing system for aircraft and ships	1978 (?) dk	British firm has license DBA (France)	dk dk
● technology connected with manufacture of high frequency testing equipment	1975 (?)	Marconi** Instruments (U.K.)	dk
● software for neutron activation analysis	1978	Codevinted Pacific (USA)	dk

V. MACHINERY & EQUIPMENT

Textiles	*Date*	*Firm(s) Which Purchased License*	*Status*
● multijaw shedding loom	1975	Nuovo Pignone (Italy)	dk
Excavation, Construction and Building			
● method of producing cisterns by an industrial means	1964 (?)	Kurita (Japan)	Abandoned
● process for making a building material silicalcite	dk	Asahi Chemical Industries (Japan)	dk
● hydraulically operated rock breaking machine	1969	Joy Manufacturing (U.S.A.)	Marketing
● water cannon	1970	Terra Space Co. (U.S.A.)	Abandoned
● underground pneumatic drill	1971	Allied Steel & Tractor (U.S.A.)	Commercialised
● asbestos-cement compacting machine	1974 (?)	Eternite'de la France (France)	dk
Miscellaneous Items			
● FPKM filter press	1967 dk dk	Hoesch AG (FRG) Tsukishima Kikai (Japan) Rexon (Finland)	Commercialised Commercialised Commercialised
● paper folding machine	1972	Koenig & Bauer (FRG)	Commercialised
● automatic wine champagnization process	1975 (?)	Moet Chandon (France)	In development
● automatic net stitching machine	1976 (?)	Norsk Fiskeredskapsindustry (Norway)	dk
● process for manufacture of brown bread	1974 (?)	Fazer A.G. (Finland)	dk
● technology for glazing sinks	1977 (?)	Gustavsberg AS (Sweden)	Commercialised
● machine for skinning cattle	1978	Maschinenfabrik Nijhuis (Holland)	In development
● production of artificial jewelry	1978 (?)	Clayhill Laboratories (Canada)	Commercialised
● automatic scraper-leveler "Stabiloplan"	1979	Japanese firm	dk

*Know-how received as part of a protocol agreement described in report (not strictly a license).
**This was a jointly developed item. Marconi has rights to West Europe, USSR to Eastern Europe.

VI. ENERGY			
● turbo drill	1954	Dresser Industries (U.S.A.)	Abandoned
● *In situ* coal gasification	1976	Texas Utilities Services, Inc. (U.S.A.)	In development
● burners for high temperature conversion of natural gas	dk	VEB Gaskombinat (GDR)	dk
● turbo superchargers for marine engines	1976 (?)	Chantiers de Atlantique (France)	dk
VII. TRANSPORTATION			
● pneumatic pipeline transport	dk	Sumitomo (Japan)	Commercialized
● bow design for ships	dk	Astano (Spain)	dk
VIII. ENVIRONMENT			
● method for treating effluent from production of ion exchange resins	dk	Zerolit Ltd. (U.K.)	dk
● M-6 detergent for cleaning oil tanker holds	dk	Swedish firm	dk
IX. MINING			
● OMTK long wall complex	1965	Mitsui Miki Machinery (Japan)	Commercialized
● PSU anti-stalling device	1973	Kuhnle, Kopp & Kausch (FRG)	Commercialized
● hydraulic mining technology	1976	Kaiser Resources Ltd. (Canada)	In Marketing

BREAKDOWN OF STATUS ON 134 LICENSE AGREEMENTS
(Approximately one-third of the total)

Total	In* Development	Being Marketed	Commercialized	Abandoned	In Abeyance	Status Unknown
134	28	4	32	7	2	61

I have personally spoken with 37 licensees, 21 of which were American.
The detail in the body of the report is based primarily on these conversations.
Not included in this license summary, but included in the report, is information about straight exports and technology of interest.

*In development covers basically two situations - the need for actual additional development of a technology to bring it to a marketable state or adaptation to U.S. market or production conditions.

II. CHEMICALS

1. Licenses

(a) METHOD FOR CONTINUOUS PRODUCTION OF PHENOLFORMALDEHYDE RESINS

Licensee - Vereinigte Chemische Fabriken (acquired by Perstorp of Sweden).

Background

In the late 1960s Vereinigte Chemische Fabriken was planning new investment in production capacity and was considering using continuous processes for certain types of resins it manufactures. During this period the firm learned through trade literature of a Soviet process which already existed. Contacts were made with Licensintorg which eventually led to an agreement in 1969.

Status

In production since 1971.

Applications

This process is for the production on a continuous basis of phenolformaldehyde resins which are known in the trade as "novolak". These resins are used as binders in grinding wheels, casting shells for foundry moulds and are a basic ingredient in bakelite-type plastics.

Significance

Through the use of a multisection reactor design with no moving parts, a fully automated process for producing "novolak" occurs in which phenol that has not reacted in polycondensation is trapped and recycled.

The advantage over the "batch" process commonly used elsewhere is in labor, power and raw material savings which continuous production allows. The content of untied phenol in the resin does not exceed 3 percent. Power requirements are reduced by separating out water before the resin is dried.

Given the batch sizes used previously by Vereinigte Chemische Fabriken an equivalent volume can now be produced in one quarter the time using the continuous process. However, for the process to be economic, large volume requirements are necessary. At a minimum, production runs must last one week.

This license agreement is regarded by the firm as significant in terms of its cost saving benefits. Given the relatively small size of the firm ($10 million sales), it is unlikely it would have developed this process on its own. As far as Perstorp knows this is the only known continuous process for making "novolak". American companies, Union Carbide and Borden, have made inquiries of Perstorp about the process.

Source

Gunnar Ljung, Perstorp, Austria.

(b) PROCESS FOR SPLITTING OLIGOMERS OF NYLON 6

Licensee - Zimmer A.G. (FRG)

Background

Zimmer sold the Soviets technology relating to the production of Nylon 6. The Soviets solved a certain well-known problem relating to the continuous production of Nylon 6 polyamide fibre. They sold the improvement back to Zimmer in 1974.

Status

In production.

Applications

Applied to the continuous production of Nylon 6 polyamide fibre by the method of continuous polymerization and continuous removal under a vacuum of compounds with low molecular weight.

Significance

The continuous production of polyamide fibres can be improved by simplifying the solution to problems caused by the resistance of certain low molecular weight compounds to thermal destruction and their low solubility in caprolactam. These properties can cause equipment clogging and shutdowns. The Soviets have developed a method of catalytic splitting of cyclic oligomers into caprolactam which can be readily condensed and fed into a reactor for polymerization.

The process utilizes a cheap catalyst whose service life is 1.5 years. Fibre quality is also said to be improved, while simplifying the entire production process. This process is reported by Licensintorg representatives to be of interest to U.S. firms.

Sources

Henning v. Eichel-Streiber, A. Hempel A.G. (sales agent for Licensintorg in FRG), technical information from "Licensintorg Bulletin of Technical Information #17".

(c) PROCESS FOR MAKING HIGH PRESSURE LATTICED POLYETHYLENE 50.

Licensee - Salzgitter (FRG)

Background

Unknown. License purchased in 1975.

Status
In development.

Applications
Production of high pressure, low density polyethylene.

Significance
The Soviet process, which was developed in conjunction with the Leuna-Werke (GDR), claims to use simpler equipment and less labor, yield higher productivity and produce higher quality polyethylene.

By their method the Soviets say operating machinery can be prepared in minutes rather than hours, and stability of the reaction itself results in reduced labor. Substituting a tubular reaction vessel for the traditional autoclave, the Soviet reactor holds more reagents and has higher productivity due to a simpler cooling process. The plant in Novopolotsk produces 65,000 tons annually.

The tubular reactor design improves the ability to measure temperature at virtually any spot within the vessel, making it possible to reach temperatures over 300° C which improve the properties of polyethylene.

Computers are used for process control and provide for automation of the basic processes — start-up, shutdown, changeover. One of the speakers at a series of Control Data Corporation sponsored seminars in the U.S. this past spring, Dr. B. Volter, generated interest by his description of the mathematical model used for simulating the ethylene polymerization process used at this plant. The seminars were designed to introduce American industry to Soviet developments in the use of computers for process control.

Sources
Henning v. Eichel-Streiber, A. Hempel A.G.; for technical description, "Soviet Technology and Engineering Digest", p. 162; and H. Donaghue, Control Data Corporation.

(d) FOR OTHER LICENSES SOLD, SEE SUMMARY; NO ADDITIONAL INFORMATION IS AVAILABLE TO ME.

2. Exports

A variety of chemicals are exported to the United States. One important trade partner of the Soviets is Engelhardt Minerals. I have not looked into this, and do not know if there is anything qualitatively significant about these chemicals.

3. Soviet Technology Being Marketed In Which U.S. Firms Are Reported To Have An Interest.

(a) SVAM (SYNTHETIC FIBROUS ANISOTROPIC MATERIALS). A new method for producing oriented glass reinforced plastics with non-woven structure suitable for heavy duty components such as turbine blades, helicopter rotors, electrical insulation, airframes, concrete reinforcement, etc. The Soviet method for producing these materials differs from conventional procedures by applying the polymer binder to the surface of the filaments at the instant they are drawn from the molten glass. By having the filaments drawn, coated with a binder and oriented in a single process, their surface remains intact and the filaments neither abrade against one another nor are they subject to the action of atmospheric humidity. This plastic can be produced either continuously or in batches.

Source
V. Volkov, Licensintorg representative; SVAM brochure.

4. Technology Of Potential Interest But Not Known To Be Part Of Soviet Marketing Effort.

(a) FLAME RETARDENT FABRIC. Glen Lunney, head of the Apollo-Soyuz project, reports that the Soviets developed a material for their space suits which has superior properties than that used by the U.S., produced by Dupont.

(b) POLYETHYLENE PLASTICIZER. A major U.S. chemical company with a technical cooperation agreement with the Soviets is interested in Soviet claims that they have developed a type of polyester plasticizer which does not get brittle at low temperatures.

III. ENERGY

1. Licenses

(a) *IN SITU* COAL GASIFICATION

Licensee - Texas Utilities Services, Inc.

Background

The Texas Utility Company is an integrated firm which controls much of its own fuel sources, operates its own pipelines and does its own engineering, construction and exploration. Texas Utilities Services, Inc. (TUSI) does the engineering for the whole system.

In the 1960s Texas Utilities Services, Inc. began diversifying its fuel base in response to the rising cost of producing natural gas by developing the extensive lignite reserves existing in Texas. By 1975 Texas Utilities Services. Inc. was getting 25% of its fuel from strip mined lignite. However, Texas lignite is found in three downward sloping formations which run across the state. Strip mining lignite found below 150-200 feet ceases to be economic.

Interest in the Soviet *in situ* gasification arose because of the company's desire to recover a greater portion of its lignite reserves than economically permitted by strip mining. The Soviet technology was brought to Texas Utilities Services, Inc.'s attention by The Resources Sciences Corporation of Tulsa which was trying to find a market for the technology. An agreement was signed in 1975 with Texas Utilities Services, Inc.

Status

In development. The first of two stages of testing has been satisfactorily completed. The first set of tests verified Soviet technical claims concerning plant design methods, computational techniques, ignition methods, et cetera.

Applications

There are two basic types of coal gasification: (1) above ground gasification where coal is converted in retorts to gas, and (2) gasification in the ground. In this instance, the Soviet process involves burning coal in place to produce a low heating value gas. Because of the economics of transport this type of gas would have to be utilized close to the site of gasification.

The technology developed by the Soviets can be applied to any type of coal except anthracite and would be used at depths below 200 feet.

Significance

The heart of the technology lies in the cumulative experience, test data and know-how relating to such things as analyzing the geological configuration of the coal in the ground, the permeability of the deposits below and above the seams, techniques for fracturing the coal, techniques for ignition of the coal, et cetera.

The acquisition of this technology is viewed by TUSI as an investment in an incremental source of fuel, the importance of which will depend on the price of other fuels in the future and the outcome of TUSI's own economic evaluations. Even if all the economics are favorable it would still be about 10 years before this technology would come into full commercial use.

In addition to extending the recovery of known coal reserves, the gas provided by this process could be used to replace natural gas as a chemical feedstock for such things as plastics, ethylene, polyethylene, et cetera.

Source

Perry Brittain, President, Texas Utilities Services,Inc.

2. Soviet Exports

(a) PEAT HARVESTING MACHINERY. The firm of Malcolm P. McLean, Inc. has purchased two pieces of Soviet peat harvesting equipment. The Soviet Union is by far the largest producer of peat in the world, harvesting over 70 million tons per year, in contrast with approximately 7 million tons by second place Ireland.

In comparison with peat harvesting equipment seen in Ireland and Finland, Soviet equipment was thought to be sturdier, employed different design concepts and generally was considered more compatible with the scale of operations envisioned in North Carolina where there exists an estimated 240 million tons of peat.

Soviet equipment to be purchased after delivery of the two prototypes purchased may include most of the basic harvesting machinery: trenchers for draining the peat, stump pullers for removing sticks and stumps in the peat, plows which facilitate drying out the peat and vacuum harvesters which pick up the peat in the field. These purchases may eventually total to around $10-$12 million in hardware. The continuous stump pulling machines are also thought to be well suited for clearing farm land. No peat harvesting equipment is produced in the U.S. as there is no peat industry. Other companies interested in Soviet peat technology are North Carolina Utilities, Ebasco, Minnesota Utilities, Texas Utilities, as well as ERDA.

This equipment would be used for harvesting peat to supply several power plants in eastern North Carolina which may eventually produce 800 megawatts of electricity. The firm is also interested in purchasing Soviet boiler technology for burning peat.

Source
William Jeter, President, Malcolm P. McLean, Inc.

3. Technologies Being Marketed In Which U.S. Firms Are Reported To Have An Interest.

(a) OIL SHALE PROCESSING. Approximately 90% of the power generated in Estonia reportedly comes from shale oil. Two methods are used, one involving the thermal processing of shale using a solid ash heat carrier. These technologies are being marketed in the U.S. by The Resource Sciences Corporation of Tulsa, Oklahoma.

Annual Soviet production is around 27 million metric tons. Some 50 products, including liquid and gas fuels, building materials and aromatic resins are processed from the shale.

Oilgram News Service reports that several U.S. companies have been talking to the Soviets about their shale processes. Due to the high capital investment costs required and uncertainty over government energy policy, RSC reports slow progress marketing these technologies.

Sources
J. Peterson, Vice President, The Resource Sciences Corporation; *Oilgram News Service*, 12/10/76.

(b) THERMAL MINING OF VISCOUS CRUDE OIL. Resource Sciences Corporation (RSC) is actively marketing Soviet technology for the recovery of heavy viscous crude. The method combines underground mining, drilling from underground sites just above the pay zone and subsurface steam injections to reduce viscosity so the oil can be pumped to the surface. A recently completed feasibility study of its applicability to the Athabascar tar sands done by RSC for six Canadian companies indicates that the process looks promising. The study estimates that oil can be produced at $5.00 per barrel using Soviet thermal mining techniques. Application of thermal mining permits recovery to reach 50-60% of original oil in place and an annual recovery rated of 10-15%.

Source
Jack Peterson, Vice President, The Resource Sciences Corporation; *Oil and Gas Journal*, January 5, 1976.

(c) PROGRAMMABLE METHOD OF CYCLIC FLOODING. Using a two dimensional mathematical model, a programmable cyclic flooding method can be used for developing fields with non-uniform collecting properties: fields whose capacity and collecting properties vary due to differing porosity conditions, fracture, stratification.

With the use of this method rates of recovery have increased from 10-30%. Final oil recovery can measure from 2 to 5% of the total oil in place over that achieved by normal water flooding techniques. For the method to be technically feasible water pump pressure must be 50% greater than for conventional flooding, requiring increased capital costs. However, the net cost of the supplementary oil removed is 25% less than compared with the rate of normal flooding.

Tailored by computer studies the programmable method makes maximum use of the hydrodynamic, capillary, elastic and gravitational forces which provide for greatest possible oil recovery. This method has been used in a number of Soviet fields. Formerly of considerable interest in the U.S., the technology is no longer being actively marketed by RSC.

Sources
Jack Peterson, Vice President, The Resource Sciences Corporation; *Oil and Gas Journal*, January 5, 1976.

4. Technologies Not Known To Be Part Of The Soviet Marketing Effort, But Of Potential Interest.

(a) According to Hugh Leiper of the Canadian Drilling Research Association, a number of Soviet technologies related to oil drilling have aroused Canadian interest and may be evaluated. These are:

- Automatic pipe handling equipment which can hoist a 90 ft. pipe section and eliminate the danger of having a man on the rig floor.
- Aluminum drill pipe, the lighter weight of which can help oilmen drill deeper wells without heavier rigs.
- An electric drill which could be better than the turbo drill. It has a down hole motor and requires less powerful pumps.
- Modular rig designs which make rigs more portable.
- The Russian turbo drill is thought to be superior to those developed by British and German companies for use in the North Sea. Built-in torque converter and hydrodynamic braking are listed as desirable features of the Soviet drill.

Advantages of the turbo drill are increased rotational speed from the usual range of 50-150 rpm to 800 rpm. Because the pipe does not turn, pipe wear is reduced which might allow use of less durable but less costly aluminum pipe or increase considerably the life span of steel pipe.

Source
Business Week, September 29, 1975.

(b) INDUCTION ENERGY STORAGE SYSTEMS. The Soviets are said to be doing much research on energy storage systems where energy is stored in a magnetic coil. Induction storage enables storing more energy in a smaller volume than is possible using capacitors (electrostatic storage). This may become significant in the future when very large amounts of energy must be stored.

One of the keys to induction storage is in the switching mechanism which requires opening a circuit rather than closing one as with capacitor technology.

The Soviets have developed high power circuit switches which involve exploding paraffin at very high speeds to open circuits.

Source

A. Kolb, President, Maxwell Laboratories.

(c) FLYWHEEL TECHNOLOGY. An old concept finding new interest at ERDA, this technology is reported to be much further developed in the USSR than in the United States. One of the centers of Soviet work is at the Energy Recuperation Laboratory in Moscow.

The Soviets appear to have recognized on a national scale the importance of flywheel energy storage and have been pursuing serious research in this area for the past 10 years. The Soviets have more patents in this field than the rest of the world put together.

The flywheel stores energy of motion—sometimes called kinetic or inertial energy. The faster a body moves or rotates, the more kinetic energy it stores. Properly designed, the flywheel will never wear out, which means that it could be many times cheaper than batteries in a long life energy storage system, such as an electric vehicle or a utilities peaking system.

The rotational speed, hence energy storage capability, of a particular flywheel is limited by a single criterion, which is the strength/density of the material from which it is made. Thus, if the usable strength of one material is twice that of another having the same density, a flywheel made of that material will spin faster and store *twice* as much energy.

Until recently, the conventional flywheel was made from solid, isotropic (same strength in all directions) material, such as steel or aluminum. Now, however, we have available a large variety of new super materials having as much as 20 times the strength-density as the best steel. Flywheels made from these filamentary super materials are known throughout the world as *Superflywheels*.

A leading Soviet and world authority on flywheel mechanics and physics, N. Gulia, has directed various flywheel powered machinery development programs. These include a truck, road scraper, urban bus, hand drill, aircraft catapult, power supply, magnetic bearing and others.

There appear to be a number of flywheel related technologies where there exist potential for reverse technology flow.

- The Soviet discretely variable transmission apparently has the highest operating efficiency of any comparable unit in the world (97%). This is unique, is covered by several USSR patents and could be useful in many of the U.S. government R&D programs. The unique element comes from having both a fixed rate of change (rotation) and range (initial and final speed).
- Kevlar (by Dupont) is the highest strength material known to the Western world for flywheel use. According to a Dupont representative, the Russians have come up with something similar, which is better. Kevlar has a tensile strength of 400,000 psi in a matrix of 500,000 psi.
- The Soviets have done a considerable amount of work in fail-safe flywheel schemes, including lightweight housing.
- The Soviets probably have more machines operating with high performance flywheels than the rest of the world put together. This means they have solved, or are solving, many machinery related problems that U.S. programs are just beginning.
- The Soviets have a whole fleet of flywheel powered switching engines and have written a book on the subject (1950s). The U.S. government just recently released an RFP on flywheel powered switching engines.
- The Soviets have used flywheel powered mine vehicles for about 30 years. The U.S. government just recently released an RFP for this.
- The Soviets operated a windmill using flywheel energy storage in 1934. The U.S. government recently released an RFP for this.

Source

David W. Rabenhorst, The Johns Hopkins University Applied Physics Laboratory, leading U.S. flywheel expert.

(d) ATOMIC FUSION, MAGNETOHYDRODYNAMICS, HIGH VOLTAGE ENERGY TRANSMISSION. Because all of the above subjects are included in the framework of U.S./Soviet bilateral scientific exchange, I will mention them only in passing.

It is generally recognized that the Soviets did pioneering work in nuclear fusion and variations of their Tokomak reactor design are used worldwide by nuclear fusion researchers.

By using the Soviet MHD pilot facility in Moscow, the U.S. can test various high temperature materials and get valuable data without having to build its own installation. The interest in MHD lies in its higher fuel efficiency.

Similarly, sharing Soviet research in high voltage power transmission has saved the U.S. considerable amounts of money which would otherwise have been necessary to duplicate their research. Use of Soviet data has eliminated the need to build another laboratory for high voltage research to augment the G.E. facility in Pittsfield, Massachusetts. Over 15 years ago the Soviets built their first 500 kilovolt cable and now have a 1150 kilovolt AC line in operation.

The U.S. is just starting to build its first 500 kilovolt line.

Sources

Charles Rudasil, Electric Power Research Institute (UHV), Barry Rossing, Westinghouse (MHD).

IV. ELECTRONICS

1. Licenses

(a) ELECTRIC IMPULSE SYSTEM OF DEICING. Soviet designed pulse-type deicing consumes 50 watts per square meter of ice as opposed to 15 kw with conventional systems and operates at temperatures to -50° C. Deicing is done by means of pulsed electromagnetic inductors which emit short elastic oscillation impulses through the ice covered sheeting. Pauses between the pulses are millions of times longer than the pulses themselves so that the structure's fatigue strength is not adversely affected. This technology has been sold to an English firm and has been of interest in the U.S.

Source

Bruce Dahlbo, Dr. Dvorkovitz and Associates; *Soviet Export*, 16, p. 39.

(b) BERYLLIUM-FREE COPPER ALLOYS. These are used in a variety of radio-electronic applications (see C 2(d), non-ferrous metallurgy). License has been sold to Metalgesellschaft of West Germany.

2. Currently Marketed Soviet Technology Reported Of Interest To U.S. Firms

PROCESS FOR MAKING SYNTHETIC DIAMOND COATING. This process utilizes low temperatures (about 77° K) and low pressure (10-5 Torr). The size of the coating area is limited only by the size of the installation. The starting material used is graphite. The film's tensile strength is 800 kg/sq mm, which is several times as strong as natural diamond. The synthetic diamond film is also claimed to be three times as hard as natural diamond with 50% greater elasticity.

Artificial diamond film has a wide range of potential applications including micro-electronics, such as: insulating substrates and coatings, with "p" and "n" conductivity capable of withstanding temperatures up to + 300° C, fixed resistors and capacitors. The technology also has uses in optics (protective and reflecting coatings on lenses, mirrors, et ceteral), instrument making (cutting tools), nuclear physics (diaphragms and windows), electron microscopy and other devices.

Source

V. Volkov, Licensintorg representative; *Soviet Technology and Engineering Digest*, p. 177.

3. Areas of Potential Interest To U.S., But Not Known To Be Part Of Soviet Marketing Effort At Present.

The Soviets are reported to have devoted considerable effort to improving the quality of materials for electronic applications. Among the materials which they are reportedly producing in large quantity and of very high quality are: gallium arsenide, indium antimonide, indium arsenide, cadmium selenide and germanium. These materials are used in electronic devices such as diodes, oscillators, amplifiers, nuclear detectors, infrared sensors, and others.

The high quality of these materials relates to structural perfection, purity and chemical homogeneity. Improved quality permits higher efficiency, higher speed and a broader range of applications.

In the past ITT purchased high quality silicon and gallium arsenide from the Soviets. However, due to supply problems, ITT is reported to have stopped buying from the Russians.

Source

Harry Gatos, Professor of Materials Science and Engineering, MIT. Mike Poylo, Consultant, ITT.

V. TECHNOLOGY RELATING TO FOOD/AGRICULTURE/NUTRITION

1. Licenses

(a) WINE CHAMPAGNIZATION. The French firm Cifal was instrumental in assisting the Russians in the recent sale to Moet Chandon of an automated wine champagnization process which makes champagne in eight days and which can be consumed after a month. This is in contrast with the conventional method which requires one year to make champagne and two more years before it can be consumed.

The Director General of Cifal, P. Detoeuf, says that the quality of the champagne is as good as that taking three years to make, but that for commercial reasons it will not be marketed as champagne. Moet Chandon reportedly is planning to use the process in California as well as in France. This process was developed approximately 20 years ago at the Institute for Wine and Liquors in Moscow.

(b) BROWN BREAD. *Soviet Export* (6/93/74) reports selling to the Finnish firm Faser AB, technology for the Russian process of making brown bread.

2. Areas of Interest

(a) SYNTHETIC CAVIAR. German and French sources (Hempel. Cifal) indicate interest in a Soviet method for making synthetic caviar.

(b) RECOVERY OF HIGH PROTEIN RESIDUE LEFT AFTER MOLASSES IS TURNED INTO RUM. House of Seagram is reported to be interested in this Soviet technique which converts the residue into pig and cattle feed. To date, North American experiments have been unsuccessful in converting the residue into something palatable to cattle (*Soviet Business and Trade*, 3/16/77).

(c) MUKA. According to sources at Canadian Pulp and Paper Institute a Canadian firm is interested in a Soviet process of cellulose hydraulysis for converting coniferous needles and leaves into a product known as Muka. This can serve as both a cattle fodder and feedstock for pharmaceuticals. The Soviets reportedly make 300,000 to 400,000 tons per year of this. D. Wang of MIT's Department of Food Science and Nutrition indicates the Soviets are also doing a large amount of work aimed at making yeast palatable to humans.

(d) USE OF BIOLOGICAL MEANS FOR CONTROLLING INSECTS AND PLANT DISEASE. According to R. Euler of the Department of Agriculture (International Programs), the Soviets are doing a lot of interesting work in this field. Problems in the U.S. with the cereal leaf beetle were brought under control using moths from the USSR.

VI. SCIENTIFIC INSTRUMENTS/MEASURING AND TESTING APPARATUSES

1. Licensee

(a) TRANSFORMER TYPE PARTICLE ACCELERATORS.

U.S. licensee - Energy Sciences, Inc.
Foreign licensee - Gottfried Reuter Holding (FRG)

Background
Energy Sciences, Inc. learned of Soviet work in the field of radiation processing at an international conference in 1970. The claims of the Soviets aroused interest in learning more. A license agreement was signed in 1973.

Status
Agreement in abeyance due to technical problems.

Applications
This class of compact electron accelerators has been used as injectors for higher energy accelerators and in laser development projects in the USSR. A major industrial application in the future, and in limited use now, is radiation processing of materials. In these processes, ionizing radiation produced by energetic electrons initiate changes within the structure of materials and living cells. Current applications in the USSR include sterilization of medical goods, curing of cable insulation, and grain deinfestation.

Significance
Technically these machines represent a unique combination of size and power. This is accomplished by using a pulsed rather than direct voltage mode. The smallest in the family is a 700 KeV, 0.5-1.0 KW accelerator with dimensions of 40 cm width and 60 cm length. The largest will have 1.5-2 MeV at 10 KW with corresponding dimensions of 100 cm and 150 cm. These equipment volumes are at least one-fifth less than would be expected for a DC accelerator of equivalent peak beam energy rating.

Until introduced in the U.S. market, the commercial importance of this equipment for ESI and its customers can not be determined. However, ESI's motivation was to provide a superior product to its customers and extend its market to higher energy applications.

Sources
J. Weisman, President, ESI; G.K. Simco and C.J. Schubert, "Transformer Type Accelerator - Compact Sources of Energetic Electrons", a paper presented at the Twelfth Symposium on Electron, Ion and Laser Beam Technology, May, 1973, MIT.

(b) PRINTED CIRCUIT BOARD RESISTORS AND POTENTIOMETERS.

Foreign licensee - H.W. Sullivan Ltd (England)

Background
License purchased around 1968. H.W. Sullivan is a manufacturer of precision equipment for the electrical industry.

Status
Commercialized.

Applications
License involves a process for manufacturing high precision printed circuit board resistors.

Significance
The firm would only say that it is pleased with the results of the license purchase. It has enhanced the competitiveness of a product which they sell worldwide as a component in larger systems.

Source
Mr. Goldfinch, Chairman, H.W. Sullivan Ltd.

(c) SYSTEMS OF PNEUMATIC LOGIC ELEMENTS.

Foreign licensee - Prodest Elettronica (Italy)

Background
Purchased around 1968; firm is of Schlumberger group.

Status
Unknown.

Applications
With SELP it is possible to obtain process control in situations where spark hazard is a problem.

Significance
SELP or System of Pneumatic Logic Elements for industrial automation features small dimensions and easy assembly. Input signals in a SELP circuit can have a

pressure between 0.1 and 1.4 kg/sq cm. The output signals have a pressure of 1.4 kg/sq cm and can be utilized for controlling any power equipment, pneumatic or electric. The system is insensitive to electrical and magnetic troubles, resistant to the action of corrosive agents and is flame proof.

At the time this was introduced in the West it was regarded as the most advanced pneumatic system in the world. Since then the West Germans are reported to have developed more advanced systems. Commercial success of this license is unknown.

Sources

C. Siemaszko, Senior Engineer, Bailey Meters and Controls; "Sistema di Elementi, Logici, Pneumatici", Prodest Elettronica brochure.

2. Commercial Benefit From Technology Exchange But Not Involving A License.

GRAPHITE FURNANCE (6" x 6" x 9") accessory to atomic absorption spectrometers. Since 1975, when Perkin Elmer signed a protocol with Leningrad Polytechnic Institute, the firm has successfully introduced a new accessory to its atomic absorption spectrometers which vaporizes samples inconvenient or impossible to analyze in solution form. This will make possible under certain conditions data analysis not feasible with conventional techniques. (Case history in Part II.)

Source

Dr. R. Scott, Chief Scientist, Perkin Elmer.

3. Soviet Exports

(a) SCIENTIFIC INSTRUMENTS purchased after the 10th International Congress of Crystallographers.

- Mir-2 x-ray shadow microscope (Kurt Mitterfellner, GmbH, FRG)
- Krab-2 six channel analyser (Kurt Mitterfellner, GmbH, FRG)
- Rina-2D x-ray pulse flaw detectors (Andrex, A.S., Denmark, (Kurt Mitterfellner GmbH, FRG)
- MARS-1 x-ray fine focus generator (Kurt Mitterfellner, GmbH FRG)

According to Kurt Mitterfellner, whose firm was established by Searle to satisfy Soviet buy back requirements, all of the above series incorporate good new ideas and in some cases are unique. In almost every instance, however, there are either design flaws or problems in the manufacturing which affect the reliability of key components.

Sources - *Soviet Export*, 1/100/76. Kurt Mitterfellner, President and consultant to Searle

(b) ELECTRON MICROSCOPE to Besancon University in France. Has 600,000 fold magnification.

Source - *Soviet Export*, 3/102/76.

(c) RINA-0D, RINA-1D, RINA-2D X-RAY PULSE FLAW DETECTORS. A consignment has been purchased by Pobe-Edelstahl (Switzerland), a producer of pipes and rolled stock. Major use will be for checking welded joints.

Source - *Soviet Export*, 4/103/76.

(d) DIFFERENTIAL SCANNING MICROCALORIMETER. This is a device for measuring energy changes caused by processes for raising temperature in cellular matter. The main application to date is in the field of biochemistry. J. Sturdevant of Yale University has used this instrument for studying the phase transition of phospholipids and the thermal denaturation of protein. He has published papers using data derived from the Soviet instrument which could not have been written otherwise.

The principal advantage of this instrument over similar ones made in the United States lies in its high degree of sensitivity. This translates into an ability to get useful data from dilute solutions. The high sensitivity of the Soviet instrument enables using 50 times less solute than comparable American equipment. The significance of this comes from the complications which arise in measuring data from more concentrated solutions. The Soviet instrument permits getting much more detailed information about the processes under study by virtue of being able to use dilute solutions.

This has been accomplished by the superior design of the electronics associated with the equipment and of the calorimetric cells. Although the electrical system uses photoamplifiers rather than solid state components, the excellent circuit design together with other features make possible the high performance. The instrument also uses an American x/y data recorder. The Soviet x/y recorder was a shelf model not designed specially for this equipment and was inferior to that which was available here.

Equipment has been sold to Yale University, the University of Oregon and Regensburg University in Germany. Rutgers and Johns Hopkins are reported interested in buying this instrument.

Source

J. Sturdevant, Yale University, Professor of Biochemistry.

(e) KVANT 9. This laser drill has been sold in West Germany through the firm A. Hempel. In comparison with other laser drills for making diamond draw plates, the Soviet model is said to be cheaper and to offer a superior optical system which enables greater precision in drilling. The optical system permits both longitudinal and transverse views. This is in contrast to competitive equipment which offers only a longitudinal view. The Kvant 9 is designed to drill holes .005 to .8 mm in diameter and up to 3 mm deep in metals, hard alloys, diamonds, sapphires and ceramics.

Specifications

Wave length of emission μm	10.6
Max pulse energy J	8
Pulse duration m sec	0.5-0.7
Magnification of optical system	
Top view	39.2 x and 62.5 x
Side view	62.5 x
Supply voltage v	220/380
Power drain kVa	2.0
Overall dimensions mm	1100 x 700 x 1200
Weight kg	200

Source — Henning V. Eichel-Streiber, Prokurist, A. Hempel

4. Areas of Interest

(a) SOVIET HAIL FIGHTING EQUIPMENT. The Atmospheric Physics Laboratory of Switzerland's Technische Hochschule is testing hail cloud dispersing Oblako and PGIM rockets which reach heights of 8.6 and 4.2 km respectively. This is part of a five-year Swiss program evaluating effectiveness of Soviet hail fighting techniques. Countries whose crops are heavily damaged by hail, such as Austria, France, FRG, Spain are reportedly interested in Soviet methods.

Source — *Soviet Export*, 4-103-76.

(b) LEM-2 ELLIPSOMETRIC LASER MICROSCOPE. At the time this was advertised in *Electronics Magazine* it was the first such instrument known to be available in the U.S. This microscope measures thin depositions of silicon oxides and nitrides ranging from 100 A to 2000 A on semi-conductor devices. It can be used to measure a very small portion (micro spot) of an actual device in process, eliminating the need to use some test vehicle.

The use of a laser provides a very stable light source with a definite frequency making it easier to calculate thickness. Knowing the thickness of the deposition is important for such things as determining turn on voltage or compatibility with the photolithography.

There was nothing considered technically new in the equipment. The laser was of a simple helium-neon variety and the principles of ellipsometry are known. However, the application of a laser as a light source for this purpose was considered novel and was something Intel was seeking.

Because of disorganization within the Soviet marketing effort, Intel had difficulty getting the additional information it needed, such as delivery dates. Subsequently, Intel learned of a similar piece of equipment which Gertner Scientific of Chicago brought out. It has since purchased the Gertner equipment.

Source - Harry Brigham, Intel.

(c) THUNDERSTORM DETECTION EQUIPMENT. Licensintorg reports U.S. interest in the PAG 1 automatic thunderstorm direction finder which picks up electromagnetic radiation from lightning discharges. In conjunction with weather radar, the PAG 1 compares information on the electric condition of clouds and that of radio echo parameters to detect storms and can differentiate thunderheads from rain clouds.

Specifications

•Probability of thunderstorm detection at a distance < 300 km not less than	.90
•Probability of detection at a distance > 400 km	.05
•Instrument error	
Mean square not more than	3°
Maximum	7°
•Dynamic range	18 dB

(An improved model is now being offered.)

Source

V. Volkov, Licensintorg; *Licensintorg Technical Bulletin* #14.

(d) ULTRACENTRIFUGE. This is a machine for separating materials according to their size and is used for such things as purifying viruses or proteins. By using a rotating magnetic drive instead of an electric motor the centrifuge can operate at higher speeds than equipment in the U.S. while keeping heat levels down. As excessive heat can be destructive, this is important. As a result of the higher speeds, productivity is greater.

The Soviets apparently have developed this equipment to meet large scale production needs for biological particles. The application of magnetic drives for ultracentrifuges may be a spin-off of work reportedly being done applying magnetic drives in generators.

Western interest in licensing know-how for this particular centrifuge designed by Professor Privolov at the Institute for Protein Chemistry, is also reported.

Source

E. Smith, Professor of Biochemistry, UCLA.

(e) KMI MICROMANIPULATOR. The Soviets have reportedly developed an improved concept over that of the French, who are the only Western producers of this equipment used for performing manipulations on microscopic cellular tissue. The Soviet equipment uses an extension concept employing mechanical arms.

The Soviets first approached LKB Produktor of Sweden for help in marketing this micromanipulator. As the design of the equipment was considered unacceptable for the Western market, LKB declined. However, LKB has assisted the Soviets with suggestions for improving their design and is working with them to develop specifications for the Western market in return for a share in future revenues.

Source

Thurgund Ek, President, LKB Produktor.

(f) PROCESS INSTRUMENTS FOR THE PAPER INDUSTRY. Representatives from the Canadian Institute for Pulp and Paper Research have identified some Soviet process control equipment which is believed to have considerable potential in Canada as well as other parts of the world.

Under the umbrella of the Canadian/Soviet exchange in the field of pulp and paper, the Soviets will be shipping equipment to Canada for evaluation.

The equipment includes:

- **A low consistency regulator.** This measures and controls on a continuous basis dilute suspensions of fiber in water. Control of the composition of the fiber slurry (consisting of fiber, chemicals, dye, water) is important for paper quality and the whole operation of the paper machine.
- **A freeness meter.** The fiber contained in the above described slurry is deposited on a large high speed wire screen belt where the fibers bond due to their own chemistry before going into the paper machine. A freeness meter measures the rate at which water will drain out of the water and fiber matte on the wire screen. This rate of water drainage in turn indicates how well the fiber is going to bond and determines the speed at which the paper machine is operated, as the percentage of solids going into the paper machine also determines the amount of drying necessary at the end.

The unique aspect of the Soviet equipment, if it satisfactorily tests out, lies in the ability to provide a continuous read out of information. All known methods have the defect of providing historical information as the measurement for both slurry consistency and freeness are currently done on a batch testing basis. By the time the results have been determined 20 minutes has already lapsed.

The technical problem that the Soviets may have solved stems from the need to design a measuring mechanism which is not influenced by the material dissolved in the water.

Source

B. Burgess, Vice President, Canadian Institute for Pulp and Paper Research.

(g) PROCESS CONTROL TECHNOLOGY. As a result of seminars sponsored by Control Data Corporation in the spring of 1977 which brought Soviet specialists to the United States, interest in the following developments was shown:

- **Low Revolution Stepping Motors (20-300 rpms).** Used in control applications where a set of contacts have to be moved from an open to close position, the Soviet motors don't use mechanical gear reduction methods to achieve low speeds. Similar in principle to the harmonic drive stepping motors made by a subsidiary of U.S. Shoe (Ikon) it makes use of flexible coupling technology. This results in the need for fewer parts and is capable of lower speeds than by conventional motors.
- **Silicon on Sapphire Strain Gage.** Used for registering amounts of pressure or vacuum placed against the gage, Soviet silicon on sapphire strain gages appear to be able to operate at higher temperatures, have greater reliability and less calibration difficulties than regular resistance thin film transducers. Whereas customary resistance devices use a lot of electronics to maintain a zero calibration, Soviet gages have the calibration in the structure of the sapphire itself.
- **Analogue Control Systems.** Audiences showed interest in Soviet use of hybrid analogue controllers which are capable of non-linear control. Analogue controllers can handle feed back, feed forward and anticipate non-linear functions. U.S. systems are usually based on linear or digital process control.

Source

Eric Kihl, Process Control Specialist, CDC. Comments of participants at the three seminars follow:

Companies Which Participated in Control Data Seminars on Soviet Developments in Process Control Technology

Foxboro Corporation
Gleason Works
Honeywell
Amtek
Mobil Oil
U.S. Steel
Gould
Fisher Controls Division of Monsanto
University of Cincinnati
3M
Baker Automation
Cities Service
Teneco
Union Carbide
Dupont

Comments Made by Participants to CDC as Part of CDC's Initial Follow-up and Evaluation of Seminars

"From what we heard they are convinced that the Soviets have good technology to offer. They are interested in a seminar on automated machine tools."

"Very interested in (1) silicon-on-sapphire transducer, (2) the bonding process of the silicon to the sapphire, and (3) the bonding agent. This company requested the Soviets visit their plant and this visit has been arranged for February 3 and 4."

"Interested in both the pressure and differential pressure transducer presented by Iordan. Had an evening meeting with Iordan and will probably buy some sample transducers."

"Very worthwhile conference - got some very useful information - no real presence in the USSR."

"Mostly interested in computers and claims to make the decision on all computers bought by Mobil Oil. Very interested in TECHNOTEC - a demonstration is being arranged by DiAmbrosio."

"Interested in transducer and controls discussed by Timofeev. Skeptical because the steel plant described by Timofeev is not yet in operation but wants to revisit the subject when the mill is in operation. Very impressed with the mathematical modeling described."

"Very deeply interested in Volter's mathematical theory and algorithms associated with the control of POLYMIR 50. Volter gave him a textbook that he had authored on the subject. The text is in Russian and Gilbert who is an ex-Soviet citizen agreed to read it and determine if the text is worthy of translation. He is looking for summer work to translate it if the contents are worth it."

"Comment - "Not anything new. We did not get any unusual information. Considering where the Soviets have come from they have come a long way and are moving very rapidly - we are not ahead of them any more".

"Very interested in transducers by Iordan and reactor model of Volter. They are doing extensive work in the USSR and East Europe and indicated they learned more about Soviet reseach projects from East Europe (Poland & C.S.S.R.) than they did from the USSR."

"Convinced that the Soviets have technology we can use. They are more interested in supervisory control and asked if we could find out if the Soviets have anything to offer in this area. They will consider sponsoring a visit if the technology exists."

"Interested in Volter's reactor modeling technologies. Requested further discussions with Volter and got them."

"Considered Soviets to be very advanced in basic research and especially so in the combination of development of the Volter control system simultaneously with the engineering design of the POLYMIR 50 plant. Had further technical discussions with Soviets during a plant visit on Thursday."

"Very interested in Iordan's flow rate measuring transducer and Volter's model of the POLYMIR 50. Comment - "they are almost as advanced as we are and I am not at liberty to discuss the matter further because our data is proprietary". The transducer he needs is one that will measure air flow rate coming from a reciprocating compressor with rates up to 200 kg/cm^2. Iordan does not have such a transducer developed but discussed research he has done along this line."

"Expressed an interest in Iordan's control system and the reactor operation models presented by Volter."

"Has an interest in the heterogeneous diaphragm described by Iordan. Also very interested in the method that is used to bond the sapphire to the header of the transducer. He definitely saw something of value to his company but would not discuss it further."

"Very interested in purchasing evaluation samples of the transducers presented by Iordan."

VII. MACHINERY AND EQUIPMENT

This category is a bit of a catchall sector for technologies the Soviets have sold, any sub-category of which is not large enough to justify its own sectoral treatment. With a few exceptions, the interest in these items is in the hardware itself rather than in a process for which process-related equipment is also necessary.

A. Textile Equipment.

1. Exports/Joint Ventures

(a) BD-200 OPEN END SPINNING MACHINES used in flow lines of automated spinning factories. Agache-Willot (France) is reported to have purchased 230 of these machines in 1974. Soviets claim these machines are easy to maintain and have higher productivity than conventional machines. Spinning speed of up to 40,000 rpms can be reached. This equipment is a product of joint Czech and Soviet development.

Source
"Techmashexport", Vol. 1, 1976.

(b) ATPR-160 PNEUMATIC RAPIER LOOMS. Two hundred of these machines delivered to Giani Teximpex of Italy in 1975.

The West German firm Carl Zangs is reported to be involved in a joint manufacturing venture using their Jacguards on Soviet ATPR looms, which are being sold in France as well.

2. Textile Machinery of Potential Interest to U.S. Firms.

The following pieces of equipment are being evaluated for sale in the U.S. market by the New York firm of Intertex:

(a) PK-114 SPINN TWISTING MACHINE FOR 2-PLY YARN. Major potential application is for manufacture of carpets made from spun yarn. The advantage over existing equipment offered by the PK machine is its ability to carry out simultaneously spinning, twisting and winding, resulting in less labor and power requirements. Floor space necessary is also reduced.

(b) PNEUMATIC RAPIER LOOM. This shuttleless loom combines the air jet and rigid rapier principle. While faster than the shuttle looms, it is not as fast as other shuttleless looms such as the Rudy loom. The ATPR rapier loom does offer a heavy, rugged workhorse-type of machine which is very price effective.

(c) LPSH-70 STAPLE FIBRE CUTTING DRAW FRAME. Though in need of some technical refinements, this is thought to be an interesting piece of equipment because of its high productivity and quality staple sliver. This equipment is used for single processing of all types of tow chemical fibres with staple sliver having a predetermined length of the fibre cutting from 74 mm up to 210 mm using the method of differential cutting.

B. Excavation, Construction and Building-Related Technology.

1. Licenses

(a) UNDERGROUND PNEUMATIC PUNCHES.

U.S. licensee - Allied Steel & Tractor

Background
Allied Steel and Tractor has a history of looking worldwide for new products which have national market potential. The company became aware of the Soviet product at a trade fair in Canada in 1970. As a producer of construction and mining equipment the pneumatic punch seemed to fit into Allied's area of market expertise.

After learning of the Soviet product, Allied approached Licensintorg in New York for further information. An agreement was signed in 1971.

Status
In production.

Applications
The product, trade named "Hole Hog", is a pneumatically operated machine which punches horizontal holes in the ground and is capable of producing up to 250 lbs. of percussion per blow. This eliminates the need to dig open trenches for laying power lines, telephone cable or small pipe. Different models can be used to bore holes ranging from 2-3/4" in diameter to 10-3/4". Depending on soil conditions the Hole Hog can travel at speeds up to four feet per minute. Though most common applications require boring distances from 30-50 feet it has an effective range up to 200 feet.

Significance
Although there is a similar product on the market produced by Schram, Allied believes the "Hole Hog" has important advantages. In particular, the Soviet designed pneumatic punch is reversible, allowing operators to retrieve the equipment should it become stuck, without having to dig up the ground.

In addition to the reversible feature, the Hole Hog's simple design with only one major moving part is said to

make it a more maintenance free machine than its competitor, as well as cheaper to produce.

The commercial impact of this product has been to enable Allied to establish an effective competitive product in a market in which it did not previously compete. The product has been widely purchased by utility companies and independent contractors. Allied says the product has been very successful since introducing it in 1972 and that there is still a fair amount of growth potential.

The Russians reportedly had been using this equipment for a number of years before it was introduced in the West. These drills are exported to West Germany through H.J. Essig and to Canada through Intercontinental Mining Tools Ltd.

Source

Leo Matthews, Vice President and General Manager, Allied Steel & Tractor.

(b) PULSED WATER JET SYSTEM.

U.S. licensee - Terraspace, Inc.

Background

Terraspace is a small R&D company which in 1970 hoped to create a market for water jet cutting equipment. The President of Terraspace, W. Cooley, is himself an authority on jet cutting technology and had done work for the Army and Navy in this field prior to forming his own company.

He learned of Soviet advances in jet cutting technology in an airplane where he happened to sit next to a gentleman from the CIA who told him of Soviet work in the field. In 1970, Terraspace signed a sublicense agreement with Patent Management, Inc.

Status

Abandoned.

Applications

The water jet technology acquired would have been used for rock tunneling, especially in rock above 20,000 psi compressive strength such as granite or dolomitic limestone.

Significance

At the Institute of Hydrodynamics of the Siberian Branch of the USSR Academy of Sciences, a water cannon has been designed capable of firing pulsed jets with jet stagnation pressures of 200,000 psi up to 10^6 psi using a special nozzle designed by B.V. Voitsekovsky. It is called a cumulation nozzle because it accumulates kinetic energy in a small volume of water. It utilizes a long length in which the area decreases approximately exponentially with the distance from the throat. This volume is initially free of liquid and is filled with air or a vacuum. A piston impacts a slug of water in the inlet chamber and extrudes it through the nozzle. Pressure waves transfer energy forward so the water which escapes first can achieve a velocity of 5000 ft. per second with air in the nozzle or 11,500 ft. per second in a vacuum of 1 to 2 Torr in the nozzle. One pulse from such a nozzle can penetrate 5 inches of copper or 1.2 inches of steel.

The advantage of this process is that the water accumulates in an unsteady flow which permits reaching jet stagnation pressures about four times higher than the maximum wall static pressure in the nozzle. However, pressures above 300,000 psi require a vacuum in the nozzle and noise becomes a serious problem. Also, at 300,000 psi the results aren't much better than that provided by rolling cutter bit machines.

This technology was being developed further under an R&D contract with the Federal Rail Administration, but due to insufficient funding the development of the system to a commercially viable state never occurred. Major modifications involved developing a storage system using compressed nitrogen instead of air and a closed cycle hydraulic system in place of the open cycle system of Voitsekovsky's which poured more than 160 gpm into the tunnelling area. However, the heart of the technology was in the actuating system. It was this aspect which required further work, particularly development of a reliable repeatingly loadable system.

A variation of this jet pulse principle has been adapted for rock hammers. The Joy Manufacturing "Hefti Hammer" is thought to be similar to the actuator mechanism of Voitsekovsky's "Hydro Hammer". Voitsekovsky's hydro-mechanical version has a piston drive system using a closed volume of compressed air for energy storage. Water at about 1000 psi is pumped in for cocking, as in his water cannon. The piston is connected by an articulated link to accelerate a 5000 lb. bit which impacts rock at a velocity of 40 ft/sec.

Source

William Cooley, President, Terraspace: "Water Jets & Rock Hammers for Tunneling in the U.S. & USSR", paper given by W. Cooley at first North American Rapid Excavation and Tunnelling Conference, Chicago, June 1972.

(c) HYDRAULIC ROCK BREAKING MACHINE.

U.S. licensee - Joy Manufacturing Co.

Background

License purchased in 1969.

Status

Undisclosed.

Applications

Rock breaking at construction sites.

Significance

Machine is very powerful and occupies relatively little space. Thought to be based on the Voitsekovsky actuator.

Source
J. Richards, Joy Manufacturing; W. Cooley, Terraspace.

(d) TECHNIQUE FOR PRODUCTION OF ABESTOS CEMENT SHEETS.

Licensee - Eternite de France

Background
Unknown.

Status
Unknown.

Applications
Manufacture of corrugated asbestos cement sheets.

Significance
The Soviets claim that their method of making corrugated asbestos cement sheets does away with moulds and equipment for cleaning and truing, and, in addition, makes possible the utilization of cheap asbestos cement mixtures of the 5th and 6th grades.Their Asbotsemmash machines use stationary sizing drums and moving compacting shafts instead of as in conventional machines, stationary compacting shafts and a sizing drum which moves. This difference allows compression to be increased to 50 kg/cm. This technology has also been sold in Hungary and Czechoslovakia.

Source
Soviet Export 4/91/74.

2. Areas of Possible Interest, But Not Known To Be Part Of Soviet Marketing Efforts.

(a) EXTRA LONG MINERAL FIBERS. The Soviets are reported to have developed techniques for making extremely long fibres which can be spun into rope-like elements. These can be particularly useful in insulating conditions where strength is important, such as wrapping insulation around pipe.

Source
George Verhage, Director, International Division, U.S. Gypsum.

(b) TECHNOLOGY ASSOCIATED WITH MANUFACTURE AND USE OF PRE-CAST CONCRETE. A number of people with whom I spoke indicated that the U.S. shouldn't overlook something the Soviets have spent so much time and energy developing; namely, systems for erecting slab buildings and large block construction and the various ancillary technologies associated with the use of cement and concrete: chemistry for developing different types of cement, pumps for pumping concrete, equipment and material handling processes associated with large scale concrete use, epoxies for gluing together concrete components, adhesives for repairing, et cetera.

Sources
G. Verhage, Director of International Division, U.S. Gypsum; Charles Thornton, President Lev Zetlin Associates; Joe Hufschmidt, President, Hufschmidt Engineers.

C. Miscellaneous.

1. Licenses

(a) FPKM FILTER PRESS.

U.S. Importer - Dart Industries
Foreign licensee - Hoesch A.G. (FRG) and Tsukishima (Japan)

Background
Under an agreement with Hoesch A.G., Dart is selling German-made Soviet presses in the United States.

Status
To date, two presses are in operation in the United States and six more on order. Hoesch is also selling presses in France, Italy, England, Belgium and Germany. The Germans have made design modifications and changed from a mechanical to a hydraulic piston drive system. The major shortcoming of the Soviet press was in the mechanical system for driving the piston which compressed the filter plates.

Applications
The FPKM filter presses provide for the dewatering of any slurry-type substance. Some of the applications are for producing pigments or dyes, making metallic soap, waste treatment (taking solids out of water) and many other applications. In Japan the presses are said to be widely used for waste treatment.

Significance
According to sources at A. Hempel, the German firm which represents Licensintorg, this filter press has been a big commercial success for Hoesch.

The technical difference from conventional filtration is in the use of a diaphragm which allows greater pressure to be exerted than by means of feed pump pressure. This produces a much higher percent of solids, the percentage gained being dependent on the reducibility of solids in a given slurry under conventional methods. For example, in some instances where only 10% solids was produced, the FPKM may produce 30% solids reducing from 90% to 70% the amount of water which must be evaporated, as the product, such as pigment, is sold in a dry form. Typical figures are 45% solids by conventional processes, 65% with the Soviet method.

These figures translate into a very significant fuel cost savings as less water needs to be evaporated per volume of slurry. Drying is carried out in gas or oil fired kilns. Evaporating one pound of water requires approximately 1000 BTUs. One large U.S. user calculates being

able to pay for the machine in three years with the oil savings realized. A medium to small size press costs in the neighborhood of $300,000-$400,000.

In addition to the fuel savings made possible, cake density and wash rates can be controlled better and the machine can be fully automated. Because of higher compression, solids come off the cloth without any sticking.

The Soviets reportedly are now starting an effort to sell directly in the U.S. their own manufactured presses which will incorporate German design improvements and, in addition, contain titanium filter plates, unlike the German presses which are one-quarter stainless steel. The combination of titanium filter plates which will last longer and are usable with a greater variety of chemicals, together with German design improvements, may make the Soviet press a strong competitor to the German version, particularly as it sells for roughly one-half the price ($150,000 vs $300,000) even with the titanium plates. Apparently the Soviets are not as yet trying hard to market their own presses in the U.S.

Japanese ability to competitively sell pigment in the U.S. despite new tariffs is attributed to their use of the Soviet presses also manufactured under license.

Source
Bob Wilbur, Technical Manager, Dart Industries. Also see *Chemical Processing Magazine*, Jan. 1977, p. 111.

(b) PAPER FOLDING MACHINE.

Licensee - Koenig & Bauer (FRG)

Background
This license was purchased in 1972.

Status
In production.

Applications
Accessory to newspaper printing machines designed especially for folding automatically Russian newspapers.

Significance
This license was acquired in order to continue a lucrative business selling presses to the Soviets. *Izvestia* required a paper folding accessory, developed in Russia, which would automatically fold newspapers as they came off the press. Koenig & Bauer bought the license in order to manufacture presses according to *Izvestia's* specifications. Because of the particular format of Russian newspapers, this particular folding machine apparently has no application outside of the USSR.

Source
H. von Eichel-Streiber, Prokurist, A. Hempel (Licensintorg sales representative).

(c) AUTOMATIC NET STITCHING MACHINE

Licensee - Norsk Fiskeredskapsindustry (Norway)

Background
Unknown.

Status
Unknown.

Applications
Makes and repairs new fish nets (purse net).

Significance
Hand stitching is completely replaced by a new machine designed by the Tallin Branch of the Fishing Industry Central Design Bureau. Stitches together netting with meshes of 10-60 mm in a fast seam. Working speed is 40 to 110 meters per hour. Machine is operated by one person.

Sources
Soviet Export, 3/101/76; *Soviet Engineering and Technology Digest*, p. 133.

2. Exports

(a) MTXM 25 TURBO COOLING MACHINE. This unique cooling machine has a wide range of possible applications. These include rubber deflashing (tire production), quick freezing of foods (McDonald's Hamburgers), freezing of scrap before crushing, cold working of high carbon and alloyed steel, shrink fitting of shafts for propellers, gears, and others.

Of particular interest, this machine requires no artificial coolants, such as freon, using atmospheric air instead. The machine can be used for both cooling and heating. Air temperature coming out of the cold pipe is -120° C. Required chamber temperature is reached 25-30 minutes after the machine is started.

Airco is reported to have an agreement to import these machines for use in the food industry while individuals at Carnegie Mellon Institute are exploring acting as a distributor for applications such as scrap freezing and rubber deflashing.

Source
Leo Prodromidos, President, PANSAT Trading Co. (Represents Techmashexport, Energomash and Machinoexport.)

3. Soviet Technology Being Marketed In Which U.S. Firms Reportedly Have An Interest.

(a) UNIVERSAL ASSEMBLY BENCH. Interest by U.S. firms is reported in a license for an assembly bench designed for assembling the basic range of radial ply and conventional angle truck tires having a diameter at the rim seat of 20" on a semi-flat drum using layer, band or combination methods.

The universal switching mechanism provides for stitching of both the cylindrical and bead portions of the

tire. Specific pressure in stitching of different sections of the tire is changed automatically due to kinematic features in the design of the stitching device.

Sources

V. Volkov, Licensintorg representative; also technical information bulletin on CPDY-65 universal assembly bench.

VIII. MEDICINE

A. Medical Devices/Equipment

1. Licenses

(a) SURGICAL STAPLERS

U.S. licensee - United States Surgical Corp.

Background

U.S. Surgical's origin and eventual commercial success was built around Soviet patents. Patent rights for a number of types of stapling instruments were acquired in 1964. Before they were introduced in 1967, U.S. Surgical had to make a major modification and improvement on the concept - replacing the system of manual staple loading with a replaceable throw-away cartridge - for it to have been viable in the U.S. market.

Status

These staplers, marketed as Auto Suture® , are widely used in U.S. hospitals, medical schools and by the Army and Navy.

Applications

The staplers are used for suturing and replace surgical thread with very fine stainless steel staples. Four varieties of staplers were developed for use in different types of operations, including thoratic surgery, gynecological surgery, gastric and general surgery.

Significance

Manual suturing techniques require pushing a needle and thread through a patient's tissue. This is time consuming and requires constant handling which, if excessive, can cause tissue injury (trauma) and may delay recovery. Using stapling instruments, significant reduction in tissue handling can be achieved in addition to shortening operating time and reducing blood loss. For example, an Auto Suture® instrument can place as many as 33 stainless steel staples simultaneously, eliminating the need to handle the tissue 33 times. A gastrectomy which might require 25 minutes to sew up manually can be done in 2 minutes with a stapler. Furthermore, the tissue can be reconstructed with greater precision.

Though the major benefits from using staples are medical - less tissue handling, less bleeding and chance of infection - there are also economic benefits. Shorter operating time means reduced use of anesthesia service and use of the operating rooms (charge on hourly basis) while improved post-operative recovery can result in the patient going home sooner.

Commercially, the company has reached the point where the new concept it has pioneered has now become widely accepted. Sales of the firm are around $19 million annually, three quarters of which come from staplers and especially replacement cartridges. Over 2 million patients have been stapled with Auto Suture® products since 1967, 500,000 of these procedures occurring in 1976. In addition to improvements to the Soviet staplers, U.S. Surgical has successfully developed new applications of its own for blood vessel ligation and skin closure instruments. The use of skin staples is growing very rapidly.

The technology represented by these stapling techniques has created a new market within the medical equipment industry, U.S. Surgical being the main beneficiary to date.

Source

Douglas Noiles, Vice President, Technology, U.S. Surgical Corporation; *U.S. Surgical Annual Report*, 1976.

(b) TOTAL HIP PROSTHESIS

U.S. licensee - U.S. Surgical Corporation

Background

This hip prosthesis was made known to U.S. Surgical by a medical consultant through their patent lawyer who learned of it while visiting the Soviet Union. A license agreement was signed in 1971.

Status

The prosthesis has been introduced on the market and has had limited success to date.

Significance

The license for the Soviet prosthesis was acquired because it was believed to have certain advantages over similar devices available in the U.S. The total hip operation was pioneered in England. The English method (Charnley) utilizes an artificial hip joint which requires cement and sufficiently strong muscle tissue to hold the hip in the socket. The Soviet prosthesis has an interlocked stem, ball and socket and is designed to eliminate the need for cement. This is significant because the cement is a frequent cause of post operative complications. Furthermore, the prosthesis can be used in cases where muscle degeneration prevents the use of the English prosthesis. The Soviet total hip prosthesis can be driven into the bone itself for in-growth where bone in-growth is used for fixation of the stem and socket components.

Commercially, the total hip prosthesis introduced by U.S. Surgical has not been as successful as expected. One problem has been the wide acceptance already gained by the English method. This has led to great numbers of surgeons trained in the English system. Also, one of the main advantages of the Soviet hip - its ability to be driven into the bone - has been reduced by virtue of the wide prevalence of rheumatoid arthritis as a cause for hip operations in the U.S. In such cases, the bone is frequently too soft to support an implant without the use of bone cement.

Also, the Soviets have combined two metal alloys, cobalt (for the ball) and titanium (for the stem and socket) which together were thought to be chemically reactive in the human body. This turns out not to be the case. The use of wrought titanium alloy provides a light and inert metal with greater strength and homogeneity than found in cobalt alloy castings commonly used.

Source

Douglas Noiles, Vice President, Technology, U.S. Surgical Corporation.

2. Exports

(a) URAT I. Siemans is currently offering as part of its line of medical equipment the URAT I device. This is a piece of equipment developed in the Soviet Union which dissolves bladder stones by ultrasonic means, thereby obviating surgical removal. Over 1,000 patients in Soviet urological clinics are reported to have been treated successfully by this device. Bladder stones varying from cherry pit to chicken egg size have been removed. Treatment may require anywhere from one to four sessions depending on the size and number of stones.

In the last year Siemans reports widening acceptance of the Soviet equipment which it buys and resells under its name without any significant modification. Reports from Siemans customers indicate satisfactory experience with URAT I.

Sources

Gerhard Mast, Director of Siemans Eastern Europe Trading Group; "URAT I", Medexport brochure.

3. Technologies Being Marketed In Which Western Firms Are Reported To Have An Interest.

(a) MACHINE FOR PRODUCTION OF PULP AND NERVE EXTRACTORS. This is a machine which was seen by representatives of the German firm Hager and Meisinger, during a tour of a plant in Kazan which manufactures various types of dental drills. The firm is interested in buying this machine if favorable terms can be agreed upon.

The firm was particularly impressed by the high productivity of the machine and its quality of construction. If purchased, it would be used to enable Hager and Meisinger to develop a new market and compete with American, Swiss and English producers of nerve extractors. This machine, with some additional modification, is believed to be capable of performance superior to its known competitors in the West.

Source

Karl Heinz-Noack, General Director, Hager and Meisinger.

(b) ILISAROV COMPRESSION-DISTRACTION APPARATUS. This apparatus when advertised recently in American medical journals was reported to have created a large interested response. This set of devices is for the setting of bones and bone fragments using crossing needles fastened to ring supports.

This apparatus can be used for:

- Repositioning and setting of fractures and of false joints of the long tubular bones.
- Surgical and non-surgical elongation of limbs.
- Compressive arthrodesis of large joints.
- Correction of defects of the long tubular bones without bone grafts.
- Elimination of persistent flexion confractures.

Source

V. Nesterkin, Medexport representative, Medexport technical brochure "The Set of Ilisarov Compression - Distraction Apparatus".

(c) URSK-7H. An ultrasonic device used for cutting or joining soft tissue or bone. Bones are normally joined by pins or glue. Using a bone powder together with a heat activated adhesive, the URSK-7H transducer fuses these elements into a solid joint. The transducer is capable of vibrating at 2,000-40,000 vibrations per second. This technology is known to be of interest to Austrian firms and to Cavitron Corp. in the United States.

Source

Edward Collins, Cavitron Corp; Mr. Peter, Prokurist, Technotherm.

(d) ARTIFICIAL EYE LENS. The Soviets are marketing an artificial lens developed by Dr. Federov which is competitive with other interocular lenses. Such a lens is used in place of thick corrective glasses or contact lenses normally worn by people who have had cataracts removed. Though placement problems are reported (sometimes the lenses have to be sutured into the iris) the quality of the plastic is considered very good. Revlon is currently evaluating the lens for possible distribution in the U.S. A few implants have already been carried out in the U.S. using the Federov lens.

Source

Dr. Goodwin Breinen, Professor of Opthamology, New York University Hospital; B. A. Fuchs, Revlon Corp; David Weeks, Director, Research to Prevent Blindness.

B. Pharmaceuticals

1. Licenses

(a) FTORAFUR (AND CARMINOMYCIN, PROSPIDINE).

U.S. licensee - Bristol-Myers Co.

Background
Bristol Myers learned of Ftorafur in 1974 through the Soviet trade mission in Japan where the drug has had notable commercial success. Negotiations continued in Moscow and New York with the State Committee for Science and Technology and two foreign trade organizations, Medexport and Licensintorg. Agreements were concluded in 1976.

Status
Further testing required.

Applications
Ftorafur is used by the Japanese and Soviets primarily for treating gastrointestinal cancer.

Significance
Ftorafur, along with carminomycin, are both cancer drugs which can be taken orally and whose toxicity is claimed by the originators to be lower than analogous drugs, thereby permitting improvements in therapy.

If the claims of Ftorafur are validated, Bristol Myers may have a drug which can successfully compete with 5FU, currently a very successful cancer drug produced by Hoffman LaRoche of Switzerland. Ftorafur is also sold in West Germany.

Source
Curtis Carlson, Patent Counsel, Bristol Myers.

(b) PYRROXAN.

U.S. licensee - American Home Products

Background
American Home Products learned of Pyrroxan through the trade literature. Further inquiries gave rise to an option agreement which was exercised and led to a license in 1974.

Status
Further testing will take 5-7 years before registered with FDA.

Application
Pyrroxan is a drug which affects the central nervous system and cardiovascular area.

Significance
Under certain conditions, Pyrroxan is thought to have fewer adverse side effects than the tranquilizers Vallium and Librium produced by Hoffman LaRoche.

American Home Products hopes Pyrroxan will pove to be an effective competitor against these two highly successful drug products.

Source
Dr. Taranko, Vice President for Research, American Home Products.

IX. METALLURGY

A. Welding and Other Fabrication Techniques

1. Licenses

(a) HIGH VELOCITY IMPACT BONDING AND METAL FORMING

U.S. licensee - Maxwell Laboratories

Background

Maxwell Laboratories is a company which manufactures capacitors for high voltage equipment, power systems and electrical components for lasers and accelerators and other high energy related equipment. Over the past ten years, its president has made frequent visits to the USSR and established good relations with Russian scientists. During discussions with scientific friends in the Soviet Union of the technical needs of his firm he learned about this bonding process.

The existence of the technology was made known to Maxwell Labs in 1973 and an agreement was signed in 1974.

Status

In development. Two years of tests have been completed which have so far corroborated Soviet claims. Soviet specifications give the following information:

• Magnetic field intensity, kOe	300-600
• Nominal working current, kA	1,000
• Power consumption kw	A few kw
• Overall dimensions mm	1700 x 2500 x 1650
• Magnetic pulse duration	A few microseconds

Applications

This technology will have as one of its applications sealing ends of nuclear fuel rods. Other applications relate to forming and shaping high strength metals such as titanium and stainless steel. In addition, metals with high resistivity and/or thin walls can be formed utilizing both high magnetic fields and high frequencies.

Significance

This bonding technique involves introducing the fuel cladding into an inductor and switching on a pulsed power source. The intensity of the magnetic field can collapse the metal of the cladding into a monolithic rod (implosion) bringing two pieces of metal together with such force (150,000 psi) as to create a bond.

Technical features of the weld reveal superior grain structure under a microscope, stemming in part from the absence of a phase change (no melting). The length of the weld is significantly longer, typically 5 times the wall thickness, providing a larger area of good bonding.

The essence of the technology is in the coil desig which generates very powerful magnetic fields and hi frequencies. The coil itself has a comparatively long li (over 1,000 shots at 400 kilogauss). No coil of this prov capability is known to exist in the U.S.

Acquiring this technology may allow Maxwell Labs develop a competitive position in the nuclear weldi market. Maxwell has already received a contract fro Hanford for an exploratory application of t technology for sealing fuel rods for breeder reactors. A additional commercial payoff from the technology seen in enabling Maxwell Labs to extend the curre capability of its Magnaform machines which magnetic ly shape and form metals. However, its own e technology limits Magnaform applications to lo strength, low resistivity metals such as copper aluminum. Using Soviet coil technology, Maxwell will able to enter markets requiring the forming and shapi of harder metals such as zircalloy, or stainless steel.

Source

A. Kolb, President, Maxwell Laboratories.

(b) FLUX CORED ELECTRODES

U.S. licensee - Chemetron Corporation
Foreign licensee - Trefileries et Ateliers de Commer (France)

Background

Chemetron learned of this technology as a result Soviet marketing efforts in the United Stat Chemetron's interest in the technology was enhanc by a competitive challenge by the Stoody Compa which has developed electrodes similar to that of t Soviets.

Status

In development and soon to be introduced on t market.

Applications

The Soviet designed electrodes will be used f welding of low carbon steels. Examples would be b plates for hydraulic cranes or 100 mm thick blast fu nace plates. These applications are referred to in t trade as "quick and dirty" work and occur where the pearance of the welded joint is not important.

Significance

Electric arc welding requires a gas shield, usual CO_2 or argon, to protect the welded joint from co taminants in the air which impair the metallurgic

quality of the weld. Flux cored electrodes provide double protection by means of a flux inside the welding rod in addition to the gas shield.

The Soviet electrodes eliminate the need for an externally provided gas shield. By means of a special configuration inside the electrode, chemicals are contained in the rod which release a protective gas during the fusing process itself. This allows for a cheaper product as tanks of argon or other gases are no longer needed.

The acquisition of this technology will allow Chemetron to react to its competition more quickly and with less expense.

Source — Mike Esser, Patent Counsel, Chemetron

(c) HPTR COLD ROLLING MILL

U.S. licensee - Patent Management, Inc.
Foreign licensee - Innocenti (Italy), Kobe Steel (Japan)

Background

Patent Management, Inc. is a technology transfer and patent holding company which has the U.S. patent rights to a number of Soviet technologies. PMI originally assisted the Soviets with their U.S. patent applications. In numerous instances PMI also acted as the principal, being the exclusive licensee of the U.S. patent rights for Soviet technology which it felt had potential in the U.S.. Patent Management might also offer Soviet know-how and equipment without patent rights. In either case, a sub-licensee had to be found for the patent rights and/or know-how and equipment in order to make money.

Status

Tube mills in use by Universal Oil Products and Carpenter Technology.

Applications

The HPTR tube mills were initially purchased by UOP to increase capacity necessary for filling an Air Force contract with Lockheed and McDonald Douglas. UOP was supplying hydraulic tubing.

Car-Tech uses these mills in the production of precision nuclear tubing. In general, these mills have as their main application cold rolling of high-tensile-strength thin wall tubing from hard-to-work metals such as zirconium, titanium and stainless steel.

Significance

UOP reports that the main advantage of these Soviet tube mills is in better control, although production rates are slower. Good control of tube reduction relates to characteristics such as concentricity and wall thickness. Better ability to produce within the required tolerances results in fewer rejections.

Car-Tech reports that wall thicknesses can be obtained of .003" in diameter down to .230" with a tolerance spread of ± .0005". Scratch-free surfaces are also routinely obtained on the inner and outer diameters. Use of the mill will enable Car-Tech to produce higher quality cladding for nuclear fuel rods than was formerly possible.

Sources

V. Haensel, Vice President for Science and Technology, UOP; Car-Tech, "Nuclear Capabilities Report", a corporate publication (date unknown, excerpt obtained from Patent Management).

2. Soviet Exports

(a) FLASH BUTT WELDING MACHINES. The Holland Corporation, a Chicago based firm specializing in the manufacture of railroad equipment, began in 1972 to import Soviet K355 flash butt welding machines. Two units are currently in use and four more are on order from the Soviet Union. In the period 1972 to 1975 over 33,000 welds have been produced using this equipment. These compact machines enable rail welding to occur on site, eliminating the need to bring rail from the producing mill to a welding plant, to then be retransported to the field.

Currently, welded rail is flash butt welded into 1440 foot sections at a welding plant and then transported to the track site where the sections are joined by a process known as thermite welding. As a result of novel mechanical and electrical design features the Soviets have constructed machines which are smaller and lighter than conventional flash butt equipment while consuming less power. These design achievements have made possible a mobile unit which allows bringing the machine to the work rather than bringing the work to the machine. As a result, savings in transportation costs and capital investment are possible. This equipment has an additional significance because flash butt welds are 100 times more reliable than the thermite welds used for site welding. The main use to date has been for welding replacement rail.

These machines were first made known to Holland Corporation in France where they were seen in use in 1968. The Soviets have 400 of these machines in operation and reportedly have eliminated altogether use of thermite "closure" welds (closure welds are those which join 1440 foot sections together).

In Austria this equipment is being purchased by Plasser and Theuer, a respected manufacturer of railroad equipment. The Austrian firm purchases the welding head from the USSR, attaches its own carriage (mobile car), and then sells the carriage and welding head as a unit under its name. To date they have sold this equipment in Austria, to the Italian State Railroad, which now only uses flash butt welds, to the Greek National Railroad and to Norway. In addition to the superiority of flash butt welds over thermite welds, the K355 has an average welding productivity of 9 welds per hour as opposed to 3-4 by the thermite process, while manpower requirements are similar for both.

As yet the sale of K355 equipment has not been of great commercial significance for Plasser & Theuer (5 units sold to date). For this costly equipment to be efficiently utilized ($350,000 for the whole unit, approximately $170,000 for welding head) large blocks of track occupancy time are necessary. In this regard, current maintenance systems of the various national railroads is

an important element in evaluating the economics of using this equipment.

Sources
R. Hunziker, Vice President, Holland Corporation; Kurt Eichinger, General Director, Plasser & Theuer.

(b) ELECTRON BEAM WELDING EQUIPMENT. The french firm Carel-Fouche'-Lanquepin has signed an agreement with Energomashexport to develop, produce and market electron beam welding equipment. The Soviets will provide the TSEP-4 guns developed at Tsniitmash (Central Research Institute for Machine Building Technology). The French firm intends to market the guns in Western Europe and the U.S.

Three guns have already been received by the French firm. They have a power rating of 60 kw for intermittent and 40 kw for continuous operation. These electron beam guns can weld up to 80 mm truck steel and up to 100 mm truck aluminum plate in a vacuum.

Source
Soviet Export, 1/106/77, p. 49.

(c) HPTR TUBE MILLS FOR MAKING THIN WALL TUBING FROM DIFFICULT-TO-WORK METALS. (See description under Section A1(c)).

3. Soviet Technology Being Marketed In Which U.S. Firms Are Reported To Have An Interest.

(a) PLASMA JET CUTTING, WELDING AND SURFACING. Licensintorg representatives in New York report that interest is being shown in Soviet plasma processing devices. Union Carbide, itself a leader in this field, is evaluating Soviet equipment.

Soviets report use of this equipment for cutting nonferrous and ferrous metals in ship building, pipe rolling and machine building industries. Using a hafnium compound electrode its service life is claimed to be not less than 600 operations and not less than 80 hours and is used for cutting metals from 10 to 80 mm thick at current intensities up to 400 amperes.

Source
V. Volkov, Licensintorg; *Licensintorg Bulletin of Technical Information*, #14.

(b) HIGH CAPACITY HOT CUTTING SAWS. The New York firm of Intertex has the exclusive rights to the import of large rotary saws for cutting hot billets. The hot saw model 2500 (saw blade diameter is 2500 mm) cuts steel with a tensile strength of no more than 15 kg/mm² at cutting temperatures of 925° to 1038° C. Cutting duration is .4 seconds and has a maximum cutting capacity of 120 cuts per hour on billets 400 mm by 400 mm. The latest model 3500 will cut hot billets 380 mm by 500 mm in 0.8 seconds at the rate of 60 cuts per hour.

American steel representatives who have seen this in operation reportedly have been impressed as no U.S. or European saw cuts as fast. The technology which permits such rapid cutting lies in the interrelationship of tooth design on the saw, rotating speed and feeding speed. Potential benefits include reduced number of saws in operation, fewer operators and greater capacity of rolling mills as well as electric power savings.

Source
M. Yhter, Intertex.

4. Areas Of Potential Interest To U.S., But Not Known To Be Part Of Current Soviet Marketing Effort.

(a) FLUXES. The Soviets are said to be devoting a large amount of research on different fluxing materials. This basically involves compounding a flux and then seeing how it works.

Fluxes are important in electric arc welding and can serve three purposes. The flux can (1) determine how effectively a joint is shielded from contamination in the air, (2) remove impurities in the metal itself, and (3) be used to add alloying material. All of these elements affect weld quality. I.A. Oehler, former head of the American Welding Society, believes this is a field in which the U.S. could learn something from the Soviets.

(b) DIFFUSION BONDING. A form of solid state joining, diffusion bonding is a means of joining material using low heat (submelting levels), and applying pressure on very clean surface areas. Diffusion bonded materials yield extremely uniform properties and a high degree of integrity, as bonding takes place at the atomic level. The degree of structural unity achieved is such that under a microscope the line of demarcation between the joined material is undetectable. Furthermore, the absence of melting point temperatures minimizes the problem of contamination from elements in the air reacting with the metal. This results in a high degree of purity important for desirable metallurgical properties which affect weld reliability under stress. It is reported that the B-1 bomber will use diffusion bonding in parts of its construction.

Diffusion bonding can be applied to homogeneous materials - joining two pieces of similar metal, or to heterogenous materials such as metal and a ceramic or tungsten on a nickel base alloy. The area in which the Soviets are reported to be doing interesting work is in bonding dissimilar materials. Heterogenous bonding has implications both with respect to the field of composites and efforts to conserve scarce materials.

- *Composites* - Diffusion bonding can be applied to the field of composites - the combining of two or more components which are in essence "glued" together. Unlike an alloy, the separate components are readily distinguishable from one another, but in diffusion bonding they are "glued" together by atomic interaction. By combining different materials in this manner it is possible to get the beneficial effects of each. A gas turbine blade, for example, would operate longer and at higher temperatures if one could bond something with high strength and high

heat resistance, but low oxidation resistance (such as tungsten) onto a material which has high oxidation resistance (a nickel base superalloy).

- ***Materials conservation*** - Chromium, for instance, is a vital alloy ingredient in stainless steel and is a relatively scarce metal. Using diffusion bonding, it would be possible to replace solid stainless steel objects, such as nuclear valves or pumps, with low carbon steel which has stainless steel bonded on the surface areas. Significant savings of chromium could be realized by using stainless steel only on that part of an object where it is required. The same principal could be applied wherever it is desirable to conserve scarce materials.

The Soviets appear to be experimenting with many types of materials, the ultimate use of which is not always apparent (such as bonding steel on graphite or joining silicon crystals). However, U.S. specialists with whom I have spoken indicate that merely knowing that certain things can be done may stimulate seeing possibilities that one didn't see before.

Sources

A. T. Male, Manager, Metals Processing Research, Westinghouse; R. Hill, Research Director, Airco Temescal; N. Promisel, former head of U.S. National Materials Advisory Board.

(c) GLUE WELDING. This entails combining a weld and an adhesive and is popularly known as glue welding. This involves coating an object to be welded with an epoxy or resin that is electrically conductive and then spot welding through the resin. The use of an adhesive contributes to the strength of the weld. The Soviets started early with this type of work and have been applying these techniques to airplane parts for at least ten years. Parts of tail sections, sheet metal within the airframe and actuating beams are among the parts for which the Soviets have used this method. The technique is also known in the U.S. but the Russians have reportedly been working with glue welding longer and it may be an area in which the U.S. could benefit from Soviet experience.

Source

I. A. Oehler, President of the American Welding and Manufacturing Company; past President of the American Welding Society.

B. Iron and Steel

1. Licenses

(a) EVAPORATIVE STAVE COOLING OF BLAST FURNACES.

U.S. licensee - Andco Corporation*
Foreign licensees - Gutehoffnungshutte (FRG), Nippon Steel (Japan), Davy Ashmore (England), McKee (Italy), Broken Hill (Australia), Paul Wurth (Luxemburg) and others.

Background

Andco Corporation is an engineering company which provides services to the iron and steel industry, including blast furnace design and repair. Andco learned of evaporative cooling through the trade literature and from contact with Japanese users of the technology. In 1972 the firm signed a license agreement.

Status

Andco has sold this process to Stelco of Canada which has had one furnace in operation for over two years and will install another system at a new site now under construction. As yet no U.S. steel companies have purchased this technology.

Applications

Evaporative stave cooling is used for cooling blast furnace stacks, although in the USSR this system is reported in use for cooling open hearth furnaces and for heating furnaces as well. To economically justify use of this system, hearth diameters of over 28 feet and top pressures greater than 10 psi are recommended.

Significance

The main economic advantage of this system of cooling comes from a doubling of the useful life of a blast furnace before it must be shut down for an overhaul. Conventional cooling systems require blast furnace relining approximately every 4-½ years. In countries where law prohibits dumping into rivers or lakes water which has been used for blast furnace cooling, evaporative cooling offers a closed loop system which eliminates this environmental problem.

Operating safety is enhanced because the cooling system relies on gravity, insulating it from damage due to power failure should that occur, while the air tight, welded furnace shell prevents gas leakage common under conventional cooling.

In general, this technology seems to be regarded as current state of the art for cooling blast furnaces as evidenced by its wide international acceptance, despite higher installation costs.

Sources

Sam Lawrence, Chief Engineer, Stelco; Herb Benz, engineer, Andco Corporation; "Russian Designed Stave Coolers Increase Blast Furnace Campaign", *Iron and Steel Engineer* (date unknown).

(b) ELECTROSLAG REMELTING OF HOLLOW INGOTS

U.S. licensee - Cabot Corporation
Foreign licensee - SKF (Sweden)

*Case history follows in Part II, p. 123

Background

In the early 1970s the Cabot Corporation was developing in-house processes for making ESR hollow ingots. During the course of a patent search it was learned that the basic technology had already been patented in the U.S. by the Paton Institute in Kiev and that the U.S. patent rights had been assigned to Patent Management.

Negotiations began in 1972 for a turn key purchase of equipment and know-how. Even though Cabot had the capability to develop the technology on its own, it sought to avoid repetitive research. After 29 months of discussion, Soviet delivery schedules and other terms were unsatisfactory and negotiations broken off. Nevertheless, Cabot purchased a straight patent license to avoid a possible patent suit.

Status

In development.

Applications

Hollow rounds can be used as starting stock for gun barrel tubes, OK couplings, rocket engine casings, discs, rings and shafts for gas turbines and numerous other applications. Cabot's main customers are in the chemical process industry and aircraft gas turbine market.

Significance

Electroslag remelting is a method of secondary refining for economically producing high grade alloys, and is particularly effective at removing sulphur impurities. One major benefit of ESR refining is in the simplification of forging.

ESR hollow ingots also provide the user with an economy. Instead of receiving a solid round ingot which has to be pierced, it has already been pierced in the remelting process itself allowing the end user, such as a turbine producer, to eliminate a step in the manufacturing process.

The Soviets have numerous patents for ESR hollow ingot production. J. Akisson, an SKF engineer, claims that the SKF installation, which may be different from Cabot's, is unique in the world in that it permits production of both solid and hollow ingots. The latter type can be produced in a broad dimensional range.

According to Akisson, SKF will increasingly replace conventional steel with ESR steel in bearings which are exposed to high loads and where failures can cause high costs in the form of expensive repairs or lost production - as in rolling mills, ore crushers and paper machines.

In certain applications space for bearings may be so limited that it is insufficient for the required size bearings of conventional steel. In such cases smaller bearings of ESR steel can be used due to higher load carrying capacity.

Sources

Joe Kline, Cabot Corporation; speech by W. Manly, Vice President, Cabot Corporation; reprinted in *Proceedings of the East-West Technology Trade Symposium*, March 1976, U.S. Department of Commerce; Jan Akisson, "SKF Stal's New Plant for Electro Slag Remelting of Steel", paper received from the author.

2. Exports

I have learned of none in the U.S. to date. The Soviets are reported exporting to France staves for evaporative cooling to be installed in the *Fos Sur Mer* Iron and Steel Complex.

3. Soviet Technology Being Marketed In Which U.S. Firms Are Reported To Have An Interest.

(a) SPECIAL LUBRICANTS for the steel industry are being offered through Intertex and negotiations are reported in progress.

Source

M. Yhter, Intertex.

(b) "GUBT" compressorless turbines recover blast furnace off gas, which would otherwise be blown out the stack, to drive turbogenerators of 600-1200 kw capacity. Martin Associates of Chagrin Falls, Ohio, is marketing this equipment and reports serious interest from Inland Steel for use in a new plant to be built near Chicago.

This equipment is designed to operate on blast furnace gas at pressures of 2.35-3.5 atmospheres. Six such units are reported in use in Japan.

Source

Lester Smith, Martin Associates.

(c) EXTERNAL DESULPHURIZATION OF PIG IRON using granulated magnesium. In the quest for higher quality steels, processes for the efficient removal of sulphur are important. The Soviet method is reported to have the active interest of some U.S. steel companies.

The Soviet technique of blowing salt coated magnesium pellets into molten pig iron purports to reduce sulphur content in cast iron to .002% in a few minutes at a cost of .4-1.0 kg of desulphurant per ton of metal depending on the initial and desired sulphur content.

Source

J. Mezoff, Vice President, American Magnesium; V. Volkov, Licensintorg; technology described in *Licensingtorg Technical Bulletin*, #17.

(d) EQUIPMENT FOR ESR INSTALLATION TO PRODUCE HOLLOW INGOTS. At least three U.S. steel companies are interested in buying Soviet equipment, according to Energomashexport representative L. Prodromidis of Pan Union. Distribution and provision of electrical components will be provided through individuals at Carnegie Mellon Institute.

(e) TECHNIQUE FOR MANUFACTURING EXTRA-HARD RAILWAY RAILS. Canadian interest is reported in Soviet methods for manufacturing fully heat treated rail with Brinell hardness in the range of 331-375 in contrast to North American rail which is around 300. According to Dan Stone, Chief Metallurgist for the

Association of American Railroads, 68% of Soviet rails are fully heat treated and they are aiming for 100%. Only 5% of U.S. rail is fully heat treated. Additional hardness increases the service life of rails by improving contact stress and fatigue and wear resistance. Due to heavy axel weights used in North America, contact stresses beyond the elastic limit of softer steels are being created, resulting in a phenomenon known as "plastic flow".

The problem which the Soviets appear to have overcome lies not so much in creating the hardness, but in the techniques of straightening the heat treated rails.

Canadian Pacific is reportedly interested in evaluating this technology, which it learned of in the context of Soviet-Canadian scientific exchange. Licensintorg representatives are just beginning a marketing effort in the U.S. and Canada.

Sources

Ken Henderson, Director of Railway Planning, Canadian Transportation Administration; R. Bechamp, Director General, Canadian Surface Rail; Licensintorg's *Bulletin of Technical Information*, #23; M. Vasilyeov, Licensintorg representative.

(f) DRY COKE QUENCHING. The quenching or cooling of coke after it has been baked in a coke oven is commonly done by spraying it with water. This "wet" quenching technique brings the temperature of incandescent coke down from approximately 2000° to 800° F.

Dry coke quenching is a process developed and widely used in the USSR which utilizes the sensible heat of the red hot coke. Gases circulated through the quenching chamber enter a waste-heat boiler where it generates steam which can be used for plant needs.

Aside from the heat recuperation aspect of the technology there are other advantages which are claimed by the Soviets though not yet universally accepted. According to Patent Management, which is trying to sell the technology in the U.S., the dry process improves coke quality. This can make possible use of lower grade coking coal and lower the coke consumption rate in the blast furnace.

The process is reported to be under serious study by a number of major U.S. steel companies. According to S. Fletcher of the American Iron and Steel Institute, dry coke quenching is widely regarded as the coming technology by the American steel industry.

The Environmental Protection Agency is interested in dry quenching because it has desirable environmental side effects. One source of pollution caused by wet quenching comes from the polluted water used to spray the coke. Phenols, ammonia, cyanites and other pollutants are released into the air when the water is vaporized. Dry quenching would eliminate this problem.

Sources

Stewart Fletcher, American Iron and Steel Institute; Mr. Brimmer, Patent Management, Inc. (SATRA); N. Plaks, EPA, Research and Development Division.

4. Areas of Potential Interest to U.S., But Not Known To Be Part Of Current Soviet Marketing Effort.

(a) ULTRASONIC REFINING OF METAL. The Soviets are reported to have in development at the Baikov Institute a method for improving the crystalline structure of steel castings which uses ultrasonic vibration and would be used with the cheaper steels. By introducing mechanical or vibratory energy into the solidifying metal, a finer, more unsegregated crystalline structure can be produced. This occurs because the vibration displaces unevenly the solid and liquid elements in the solidifying metal, breaking off newly formed crystallites which in turn nucleate to form new crystals. The more uniform grain structure brought about by this shaking improves the hot working properties of the metal castings.

(b) GAS PRESSURIZED CUPOLA. This is an arrangement used in the Soviet Union which reduces the rate of gas flow inside a blast furnace. The "chimney effect" describes a phenomenon which occurs as a result of air channels formed through the charge inside the blast furnace. These allow reactive gases to move out of the furnace more quickly than is desirable. By use of a pressure cupola, gas rises more slowly, improving the accuracy and efficiency of the reaction inside the furnace. The efficiency of the chemical reactions inside the furnace affect the distribution of the undesirable elements in the pig iron while improving the productivity of the furnace. The improved structural quality of the iron is particularly important for nodular and malleable irons which are more expensive and have to meet more exact chemical and physical specifications.

(c) PLASMA ARC REMELTING. This technology is a method of secondary remelting which uses ionized gas both for melting and for alloying. Certain gases such as hydrogen or nitrogen, when added to particular steels, enhance their properties. Current methods for alloying gases, nitrogen in particular, are considered expensive and don't provide satisfactory, reproduceable results. PAR has been put into practice in the USSR and appears to be a more efficient solution for introducing nitrogen.

The importance of adding nitrogen to austenitic or non-magnetic grades of stainless steel lies in the improved strength and corrosion resistance which results. Furthermore, the use of nitrogen allows reducing the amount of nickel alloy necessary while still maintaining the austenitic structure, thereby providing a resource saving benefit. With lower grades of steel, nitrogen improves the machining properties of the steel, saving energy and improving surface finish.

There are many other potential uses of PAR as well, such as remelting titanium and high titanium alloys.

Source

Nick Grant, Director, Materials Science and Applied Engineering Department, MIT. (for above 3 items)

C. Non-Ferrous Technology

1. Licenses

(a) ELECTROLYTIC CELLS FOR MAGNESIUM EXTRACTION

U.S. licensee - American Magnesium

Background

American Magnesium was founded in the 1960s to provide additional competition in an industry dominated at the time by Dow Chemical. Due to a variety of operating difficulties, including pollution problems with the State of Texas, American Magnesium closed its Snyder plant in 1971.

About the same time, American Magnesium had learned through the trade literature of Soviet electrolytic cells which appeared to meet their needs. A visit to the Soviet Institute in Leningrad was made (VAMI) with the intention of exchanging American Magnesium's feed preparation technology for Soviet cell technology. In discussions with Institute personnel the question was asked for how much they would sell their cell technology. When it was learned that the Russians valued their cell technology less than American Magnesium valued its feed preparation technology, the decision was made to buy rather than exchange.

Status

In production since 1974.

Applications

Soviet diaphragmless electrolytic cells are used for producing primary magnesium and chlorine from magnesium chloride.

Significance

The Soviet designed electrolytic cells represent an improvement upon the basic I. G. Farben technology developed in Germany before World War II.

Advantages claimed by the Soviets for their cells relate to the need for less floor space for the installations, reduced power consumption by 10-15 percent, reduction of chlorine discharge from the cells (eliminating need to wear gas masks) and corresponding increase in commercial chlorine output of about 100 kg per ton of magnesium. The core of the cell technology lies in the diaphragmless design which does away with the need for auxiliary chambers for cathodes and other equipment.

The choice of the Soviet cell design together with a number of other operating economies and improvements in pollution control equipment made by the company have allowed it to resume economical operation of its Snyder plant.

Sources

John Mezoff, Vice President for Marketing, American Magnesium; *Soviet Technology and Engineering Digest*, article by N. Bondarenko and O. Desyatnikov of VAMI.

(b) ASYMETRICALLY DESIGNED BUS BAR ARRANGEMENT

U.S. licensee - none
Foreign licensees - Alcan (Canada); Nippon Light Metal Co. (Japan)

Background

Alcan representatives met Soviet personnel at a magnesium conference held in Canada. These contacts led to a visit to Zaporozhe in the Ukraine where Soviet pot lines and bus bar arrangements were observed. A license agreement was signed in 1972.

Status

In production.

Applications

Bus bars are aluminum bars which carry current to the reduction cells ("pots" or "pot line" for a whole string of cells) in which the smelting of alumina occurs. This is carried out by an electrolytic process which separates oxygen from alumina to produce metallic aluminum.

Significance

The productivity of the "pots" or rate of smelting increases with higher amperages. As higher amperages are reached various forms of magnetic interference develop. One of the problems caused by the strong magnetic field associated with higher amperages is "humping" of the metal in the pots which causes uneven distribution of current and heating effect. The Soviets have come up with an effective solution to this problem by means of an asymetrical system of current distribution which increases Faraday efficiency and results in a 1 to 1-½% increase in productivity.

Alcan has realized only two-thirds of the productivity gains claimed by the Russians. This is due to adaptations and changes in connections necessary to work on their equipment.

Alcan purchased the license because it met a specific need. The Soviets had developed a solution which looked better than the method under development by Alcan. The Soviets have already worked with amperages of 250-300 kiloamps. Alcan is using the Soviet bus bar arrangement for 130 kiloamp end-to-end pot lines.

Sources

Tom Anderson, Vice President for Smelting, Alcan; R. Legault, Consultant-Smelting Technology, Alcan.

(c) METHOD FOR PRODUCTION OF ALUMINUM-SILICON ALLOYS

U.S. licensee - Ethyl Corporation

Background

Ethyl originally learned of this technology from contacts in the construction industry. Subsequent communication with Licensintorg in New York City eventually led to an agreement in 1973.

Status
In development.

Applications
Unknown.

Significance
This technology was acquired because it fitted in with Ethyl's efforts to diversify its competitive base. The basic technology which the Soviets have developed concerns a new process for producing aluminum-silicon alloys in high power electric-arc furnaces which make it possible to use lower grade raw materials and eliminates completely the use of pure silicon. This is in contrast to the electrolysis technique which requires greater equipment investment and higher grades of raw material.

Ethyl will be taking the basic technology and applying it to a different use than the Soviets, but build on their experience. The impact for the company will be to shorten the development period for their own new technology.

Source
Don Hutchinson, Research Dept., Ethyl Corporation; Don Johnson, Patent Counsel, Ethyl Corporation.

(d) PROCESS TECHNOLOGY FOR EXTRACTING ALUMINA FROM ALUNITE ORE

U.S. licensee - Alumet Corporation

Background
The Alumet Corporation is a joint venture between Southwire Corporation, National Steel and Earth Sciences Corporation formed in 1972 for the purpose of developing technology for the commercial utilization of a non-bauxitic ore, alunite, to produce aluminum. Large reserves of alunite exist in Utah and Nevada, most of which is controlled by Alumet.

Upon formation of the joint venture, Southwire took the initiative in finding out about the availability of technology already developed for alumina extraction from alunite. Through the trade literature it was learned that the Soviets had an alunite processing facility operating in Azerbaijan. Persistent efforts were made by Southwire to learn more of Soviet work. Eventually a visit to Karovobad was arranged which led to the purchase of a license in 1974.*

Status
In development.

Applications
The technology purchased by Alumet represents only that portion of the total production technology relating to the crushing, grinding and roasting of alunite.

Aside from producing alumina, alunite leaves commercial by-products such as potassium sulphate, sulphuric acid, vanadium pentoxide and gallium.

Significance
Concern about dependence on foreign sources of bauxite, particularly those sources located in third world countries, is leading many aluminum producers throughout the world to look for other sources of alumina. Developing non-bauxite sources for manufacturing aluminum, it is believed, will help keep downward pressure on the price of bauxite.

Though production of alumina from alunite is currently estimated as more expensive than production from bauxite ($100-$120 per ton vs $150-$200), Alumet is going forward on the assumption that by the time they have a facility on line world bauxite prices will have risen to make alunite competitive. In addition to alumina, sale of alunite by-products is regarded as necessary for the process to be commercially viable.

While the ultimate commercial significance of this technology is subject to speculation, the acquisition of know-how for the removal of sulphur impurities is regarded by Southwire as representing a significant saving vis-a-vis their own research efforts (2-3 years). However, the specifications for the process equipment have had to be redone. The technology purchased represented a second generation technology which the Soviets themselves had not yet put into use.

Sources
S. Etheridge, Sovtec Division of Southwire Corporation; Mr. Chandler, Vice President, Southwire Corporation.

(e) ELECTROMAGNETIC CASTING OF ALUMINUM

U.S. licensees - Kaiser Aluminum, Reynolds Aluminum
Foreign licensees - Alusuisse (Switzerland); Mitsubishi Chemical (Japan)

Background
Kaiser Aluminum first learned of the Soviet casting technology back in the late 1960s when representatives of the firm were attending an international meeting on technology (recollections are dim, but Dr. Pritchett believes it was sponsored by the State Department). Interest developed in the Soviet process and steps were set in motion to learn more.

Status
In development.

Applications
Electromagnetic casting has a general application in the field of aluminum alloys and can be used to produce ingots suitable for sheet, plate, forgings and extrusions.

Significance
The Soviet process for casting aluminum involves the use of electromagnetism to control and shape molten

*At Karovobad, Southwire was told of a second generation technology which the Soviets themselves had not yet put into use. Southwire bought the second generation technology.

metal during ingot casting in place of the conventional chilled metal mold.

The main advantage of this casting technique is the elimination of a step in the fabrication of the ingot known as scalping. Scalping refers to the removal of rough surface metal caused by contact of molten metal with a chilled mold. The high surface quality of electromagnotically cast ingot eliminates this step. Other advantages relate to superior grain structure and diffusion of alloying constituents which favorably affect the amount of time needed to accomplish homogeneity.

The heart of the technology is in the control of alternating magnetic currents used to levitate the metal. The principal of magnetic levitation has been known for some time, but the Soviets have been the first to put it into commercial application for purposes of casting metal. In this regard what they have accomplished has been described as a genuine breakthrough.

The commercial significance of this technology stems from anticipated cost savings in the production of ingots. These have been estimated in the range of a few tenths of a cent per pound to as much as one cent under certain conditions.

Source

Dr. Thomas Pritchett, Vice President and Research Director for Metals of Kaiser Aluminum and Chemicals Corporation.

(f) KIVCET PROCESS

Licensee - Kloeckner-Humbolt-Deutz (FRG)

Background

Unknown.

Applications

Cyclone smelting of lead and zinc bearing copper concentrates.

Significance

This process is viewed as having several important advantages over current technology for smelting lean copper based ores. The advantages involve investment and operating economies, higher percentage of recovery of metal from the ore, reduced environmental pollution and economically useful sulphur by-products.

The processing of the ore is simplified by having the roasting and smelting take place in one step. Finely crushed, unbaked ore particles (less than 1 mm and moisture of 2%) are metered into the smelting cyclone through closed conveyances while oxygen enters from the side. The melt, together with combusted gases are discharged into a chamber where the melt and reaction gases are separated. The gases pass through a shaft designed as an indirect heat exchanger and enter an electrostatic precipitator at 500° to 600° C. The purified gas leaving the precipitator contains 80-85% sulphur dioxide and is suitable for producing liquid sulphur dioxide or pure sulphur. If the sulphur content of the ore fed into the cyclone is greater than 25%, smelting can occur spontaneously without any fuel requirement.

The resulting matte and slag mixture left in the separation chamber passes into an electric ore furnace where the lead and zinc are vaporized and leave the hearth in the furnace gas which can be condensed or afterburnt to an oxide with high metallic content.

Kloeckner-Humbolt-Deutz engineers and constructs smelters. Their business is worldwide and particularly important in less developed countries. This technology was viewed by KHD as representing a definite improvement over the state of the art and enhancing its marketing capability.

KHD also has an interest in the use of a Kivcet process variation which the Soviets have developed for smelting lead concentrates, the advantages of which are similar to the original Kivcet process.

The Soviets currently have a 300-350 ton per day copper smelter in operation in Kazakstan while a 600 ton facility is under construction and a 1,000 ton smelter planned.

Sources

"The KIVCET cyclone smelting process for impure copper concentrates", *Journal of Metals*, July 1976, by Gerhard Melcher, Erich Mueller and Horst Weigle. "Die Verhüttung von Bleikonzentraten nach dem KIVCET Verfahren", *Erzmetal*, 1976, Vol. 29, by Erich Mueller.

2. Soviet Technology Being Marketed In Which U.S. Firms Are Reported To Have An Interest.

Aside from being a licensee of the Soviets, the Southwire Corporation has a sales representation agreement with Licensintorg in the field of non-ferrous metallurgy. Among the 25 or 30 items in its portfolio, the following technologies are reported as having generated considerable interest to date:

(a) BASALTIC FIBER PRODUCTION TECHNOLOGY. This process is currently being negotiated by a Washington area firm. It involves melting basalt rock to produce micro, ultra and super thin continuous fibers produced by the vertical drawing method. These fibers purport to be heat resistant up to 900° C and stable at low temperatures (-269° C). The fibers can be used for thermal insulation, sound absorption, filtration and for insulating material in cyrogenic applications. The process itself involves only basalt melting, eliminating the need for soda ash and boron compositions used in glass fiber production.

The end product is claimed to have properties superior to fiber glass while cheaper to produce.

(b) ROTARY KILN DIAPHRAGM. Rotary kilns are used for drying wet powdery material such as aluminum hydroxide. The Soviet designed kiln uses a diaphragm device inside which purports to raise the capacity of the kiln, reduce fuel consumption and prevent entrance of dry material into the high temperature zone of the kiln.

Because of the increased heating efficiency claimed by the device and reduction in fuel consumption, this technology has received wide interest from U.S. companies.

(c) FLUIDIZED BED COOLER. This involves a new design of a fluidized bed cooling unit for cooling alumina or other fine grained inert material, calcinated in a rotary kiln. The Soviet design makes it possible, successively, to separate alumina from refactory breakages and crumbs, cool the alumina, heat and clean air supplied to the kiln for fuel combustion and discharge material without shutting down the kiln or disrupting operations. Increased output and reduced fuel consumption are the main advantages claimed. This technology is also reported to have aroused wide interest in the U.S.

Fluidized bed coolers of capacities of 18-36 tons per hour have been successfully operated at alumina plants in the USSR since 1967 according to Soviet sources.

(d) BERYLLIUM FREE COPPER BASE ALLOYS. A potentially interesting technology now under evaluation by Amco Metals relates to a group of non-magnetic (Kamelin), high strength (Kamelon) and current carrying (N1, N2) spring copper base alloys. The advantage of all these alloys is the claim to provide superior properties to beryllium bronze while eliminating the use of beryllium, a highly toxic and expensive material.*

- *Non-magnetic toxic free copper base alloy (Kamelin)* - used in manufacturing bars and strips for current carrying instrument components and as material for non-magnetic shims or spacers in the gaps of magnetic heads. Kamelin can be rolled into foil as thin as 0.8 microns. Pulse reproduction using Kamelin foil is claimed to be higher than from foil made from beryllium bronze. This improves frequency response, increases playback amplitude and diminishes its scatter.
- *High strength copper base alloy (Kamelon)* - used in production of elastic sensitive elements of a complex configuration such as sylphones, membranes and springs used in radio-electronic applications. Kamelon is said to possess corrosion resistant properties superior to beryllium bronze and can be used at temperatures between -60° C and 250° C and air moisture up to 98 percent without protective gold or silver coating. When the alloy is quenched it possesses high ductility for cold rolling. After tempering, the alloy acquires a high tensile strength and limit of elasticity. As a spring material Kamelon is supposed to have corrosion resistance properties superior to titanium and strength superior to stainless steel.
- *Current carrying spring copper base alloys N1 and N2* - used spring parts for radio, electronic and instrument industries. These alloys can be used as wire, rods, strip, ribbons, et cetera and claim to have high electrical conductivity, high relaxation resistance, corrosion resistance and heat resistance properties. These alloys don't lose their properties at 300° C. A substantial amount of .2 mm wire of this alloy was used in the Apollo/Soyuz space program.

(e) TECHNOLOGY FOR PRODUCING TITANIUM SPONGE. The Soviets claim to have developed technology for the production of high quality, low cost titanium sponge. The technology has four main steps each of which may be licensed. These include:

- *Upgrading of titantium bearing concentrates.* Soviet technology makes possible use of less expensive ilmenite concentrates. Upgrading by reduction in electric smelters yields cast iron and titanium slag containing up to 90% titanium oxide. Know-how includes control of high magnesium and calcium content in the ore.
- *Titanium tetrochloride production.* Due to a method which yields a high rate of feed of the chlorine into the chlorator the Soviets are prepared to guarantee titanium recovery from the charge of 92-95% and output of 4-10 ± /m³ per day.
- *Titanium tetrachloride purification.* Of particular interest in the U.S., the Soviets have developed a method for continuous purification of titanium tetrachloride which claims to remove virtually all impurities, including highly volatile phosphorus, arsenic and boron. The final product contains not more than 1.10^{-6} of aluminum, vanadin iron, potassium, calcium, copper, magnesium, manganese, arsenic nickel, sodium lead, chromium and zinc.
- *Titanium reduction.* Average impurities content of titanium sponge reduced in Soviet reactors is .06 iron, .04 oxygen, 102 nitrogen, .01 carbon, .01 silicum. Product size ranges from 12-70 mm lumps.

Some advantages claimed for this process are: (1) increase in total production by 10-15% over conventional methods, (2) 98.5% extraction of titanium from titanium tetrachloride, (3) shortened separation cycle of 10-15 hours over existing process, (4) formation of dense non-flammable magnesium condensate, (5) good labor conditions.

All these technologies marketed by Southwire Corp. are reported to be in wide use in the Soviet Union. At least one British firm is said to be interested in the titanium technology too.

Source

Sam Etheridge, SOVTEC Division, Southwire Corporation; Fraenkel, Derby & Co. (England).

D. Process Engineering.

1. Licenses

(a) MICROSCALPER

U.S. licensee - Fenn Manufacturing
Foreign licensee - Kieserling and Albrecht (FRG)

*One of these alloys was licensed to Metalgesellschaft of West Germany.

Background

Kieserling and Albrecht has had a substantial business selling machine tools to the Soviet Union. The Russians came to Kieserling and Albrecht to ask if they were interested in a new process for cleaning the surface of metals. After prolonged negotiations Kieserling and Albrecht signed a license agreement in 1973. Much development work was subsequently necessary to make the idea commercial.

Status

Being marketed; test prototypes. Kieserling and Albrecht expects 4-5 years of missionary work before the new concept is accepted by industry.

Applications

Microscalpers are used for removing decarbonized edge residue from rolled materials of almost any kind: alloyed and non-alloyed carbon steel, stainless steel, titanium and titanium alloys, as well as plastic materials. The microscalpers are available in widths from 1 cm to 1 meter.

Significance

The Soviets have developed a tool for descaling metal. This is a brush-like wheel which can contain up to 40 million tightly packed steel wires of tool steel hardness. The advantages of the tool include:

- High degree of durability, from 500 to 2000 hours depending on type of treatment required.
- Metal scrap cutoffs can be remelted or used in a powder metallurgical process.
- No dust, smell or noise pollution.
- Small space requirements and low maintenance.

Commercially, Kieserling and Albrecht is introducing a new concept in descaling metal which, because of the above advantages, it expects will eventually replace current methods. This particular process is unique.

Source

Marcus V. Busse, President, Kieserling and Albrecht.

2. Technologies Being Marketed In Which U.S. Firms Are Reported To Have An Interest.

(a) VIBRATION ROLLING. Vibration rolling is a technique of microrelief surface control which uses a diamond tip or steel bearing in a vibration head to make a preset pattern of micrometric grooves on a component surface. Micrometric surface optimization makes parts subject to friction more wear resistant. Some of the Soviet claims: Microrelief on rolling mill rollers prevents metal slipping and increases mill efficiency; cylinder sleeves and piston rings last 50-80% longer; component running-in is reduced or eliminated; vibration rolling reduces machine and instrument slide response 35-40%; reduces by 50-70% wear on measuring instruments; can be used on glass, thereby changing reflection and transmission characteristics. This technology is reported used in 120 Soviet plants.

Dr. Dvorkovitz and Associates indicate that very serious interest was shown in this technology by a U.S. firm, but sufficient information was never forthcoming to make possible commercial negotiations.

Source

Technical information from *Soviet Export*, 1/106/77; Bruce Dahlbo, Dr. Dvorkovitz and Associates.

X. MINING

1. Licenses

(a) OMKT LONG WALL MINING COMPLEX

Licensee - Mitsui Miiki Machinery Co. (Japan)

Background
Purchased in 1965.

Status
In production and being sold to numerous other Japanese firms, including Mitsuibishi Mining, Sumitomo Metal Industries, Hokkaidi Colliery, Matsushima Coal Mine Co. and Mitsui Mining Co.

Applications
Underground mining of coal, especially in steeply pitching seams.

Significance
This equipment apparently has significantly increased mine productivity and its safety props (roof supports) protect workers from cave-ins.

The machinery has been improved upon since 1965 by a new OKP series which is said to be capable of producing 98 tons per hour.

In the United States a Bureau of Mines Trip Report written in 1972 concludes, "It would be proper to state that we saw features of Soviet coal mining that would be useful to adopt in this country and also other features which would be unacceptable in the United States. The Soviets believe that the future of deep coal mining lies in the use of shield type supports with full face, total recovery of coal. In this respect, the Soviets are ahead of us in developing mining technology for deep coal seams which are also gaseous and subject to outbursts."

Also of interest to the U.S. would be procedures and techniques, as well as equipment. This refers to such things as fire control measures, taking maximum advantage of strata conditions, procedures for laying out long walls, et cetera.

Source
Soviet Technology and Engineering Digest; also brochure "Licensintorg"; Joe Yancik, Director, Bureau of Mines.

(b) HYDRAULIC MINING OF COAL

Licensee - Kaiser Resources Ltd. (Canada (See Part Two, Sec. V, for full description)

(c) AXIAL BLOWERS

Licensee - Kuhnle, Kopp & Kausch (FRG); VEB Kombinat, Luft, Kalte Technik (GDR)

Background
License purchased by West German firm in 1973.

Status
Successfully commercialized.

Applications
Mine ventilation, smoke removal, blowers for hovercraft and other possibilities.

Significance
This technology centers around the PSU anti-stalling device. It comprises a rim with blades which is installed at the intake of a conventional axial fan. The PSU eliminates air stream stalling from the rotor blades and prevents surging. The blades are fitted on a tapered hub so that the air current passing through the rotor is given added velocity.

The effect of the anti-stalling device is said to raise fan pressure by 10-15%, efficiency by 305% and reduce noise levels. Because there is no swinging, several axial fans may be combined where necessary.

Source
Henning V. Eichel-Streiber, Prokurist, A. Hemple; *Soviet Technology & Engineering Digest*, Vneshtorgreklamma 1976.

2. Exports

Five excavating shovels and two self-propelled drilling machines for blasting holes have been ordered by Cleveland Cliff of Ishpening, Michigan. Short delivery schedules (6-8 months) and favorable commercial terms are reported among the reasons for purchase.

Dresser Minerals, Erie Mining, Peabody Coal Co. are also reported to be looking at the possibility of importing Soviet equipment.

Source
Leo Prodromidis, President, Pansat (firm is sales agent for Soviet FTOs).

3. Areas of Potential Interest

(a) WATER JET LONG WALL MINING MACHINES. In the Ukraine a long wall mining machine has been developed which uses high pressure water jets

to assist in cutting coal. It reduces coal dust at the face and minimizes the production of fine coal. Soviet tests were underway in 1974. Tests done in the U.S. in 1976 were reportedly less sophisticated than those in the USSR.

When the unit operates with sprinkling (without using high pressure jets) dust content of the air at the long wall was 210-250 mg/cu m while with the high pressure jets, it was 5-7 mg/cu m. The yield of 6 mm coal lumps did not exceed 16%.

Source

W. Cooley, President, Terraspace, and consultant to BOM; *Underground Hydraulic Mining & Means of Coal and Rock Extraction*, pp. 34-36, by Okhrimenko, Kuprin and Ishchuk, edited by W. Cooley and A. Brichant; translated by Literature Research, Inc., Centerville, Virginia.

(b) HYDROTRANSPORT OF COAL. The following information, collected for the Bureau of Mines as part of its efforts to survey world hydraulic mining technology, is drawn from reviews of three Russian books.

The reviewers state in their summary: "All three volumes represent unique and outstanding contributions to the world literature on slurry transport and exhibit the important and extensive effort devoted to this field in the USSR. The significance of these books is related not only to pipeline transport of coal from mines to power plants or beneficiation plants but slurry transport in general. The ultimate applications may include systems incorporating hydraulic mines, slurry pipelines and direct combustion of coal slurry in boilers."

In their general comments on the three volumes, the reviewers conclude: "All three volumes stress a systems approach which suggests a well-balanced background of the authors. Since two of these books (Traynis's and Nurok's) where published in 1970, it is obvious that the Russians are leaders in coal hydrotransport theory and practice from the mine to the washing plant. 'Russia', in this case includes Polish practice which apparently plays a significant role. It is also apparent that Soviet insight into the structure of fine coal slurries is of the highest order even though they don't have an existing long distance pipeline comparable to the Black Mesa coal slurry pipeline in the U.S.

Of specific hardware interest the reviewers single out two items for attention.

- *Wheel stand for slurry testing.* This is a device for obtaining research data simulating the flow of slurries (solid-liquid mixtures) in horizontal pipes. It consists of a pipe bent into a circular wheel which is partially filled with slurry and rotated around a horizontal axis. The pipe rotates relative to the slurry and the power required for rotation is a measure of the power required for pumping the slurry through a pipe. It may be applied to obtain design data on coal slurry pipelines or piping systems for carrying minerals, ore, rock, sand, gravel and tailings from mineral processing. The data obtainable include pumping power, critical velocity required to prevent pipe plugging, degradation of lump sizes and wear of the pipe.

  Wheel stands are used in Russia to obtain large quantities of experimental data providing a good understanding of slurry flow processes. The capital and operating cost of such a test stand is much lower than the cost of pump and pipe-loop test stands which have been used in Western countries. Although wheel stand data were published in the USSR in 1970, translation into English did not occur until 1976. It constitutes a major contribution to the technology of hydrotransport, which is of increasing interest in the U.S. for short and long distance transportation of coal.
- *Coal slurry pumps.* In the USSR, very large two-stage centrifugal slurry pumps of 5000 kw power have been developed for hoisting and transporting coarse coal with lump sizes up to 10 cm. These hav- much higher pressure output than slurry pumps available in any other country. They are used to transport coal from underground hydraulic coal mines to power plants or beneficiation plants. They are probably also applicable for long distance coal slurry pipelines to replace reciprocating pumps which have been used in the U.S. Their cost would be lower and their mechanical reliability higher.

Their largest coal slurry pump has specifications of 20 cubic feet per second at 639 psi. Horse power rating is given at 5028 hp at 65% efficiency at 1450 rpm. The motor and baseplates total weight is 67 metric tons.

Source

"Review of Russian Data on Hydrotransport of Coal", by W. Cooley (President, Terraspace, Inc.) and R. Faddick (Professor at Colorado School of Mines) prepared for BOM contract #J0265016. Books reviewed: *"Means of Increasing the Effectiveness of Hydrotransport of Coal"*, V.N. Pokrovskaya (1972); *"Parameters and Modes of Hydraulic Transport of Coal"*, V.V. Traynis (1970), chapter from book *"Hydromechanization of Open Cast Workings"*, G.A. Nurok (1970).

XI. TRANSPORTATION

1. Licenses

(a) PNEUMATIC PIPE CONVEYOR SYSTEM

Licensee - Sumitomo (Japan)

Background
Unknown.

Status
In use.

Applications
This air operated container pipeline system can carry sand, cement, gravel, ores, farm produce, mail, or practically anything. Materials are transported in cars coupled end-to-end like railroad cars. Pipelines can be built above or underground.

Significance
Given the proper relationship between capacity and line length (larger capacity systems can be operated at shorter distances) this is supposed to be a more economical transport system than trucks or rail and is pollution free. The Soviets themselves have three systems in operation and a total of 20 planned.

Soviets claim that their system has capacity advantages over other pneumatic pipeline systems.

Specifications of systems being built in the USSR

Material	Project sites: Tbilisi sand	Volgograd sand	Tula crushed stone	Leningrad home refuse
Annual volume:				
mln. tons	2	3	0.56	–
mln. cu.m	–	–	–	0.5
Handling distance, km	50.0	13.8	4.2	11.0
Personnel	59	25	9	30
Container cars per train	8	12	12	6
Train payload, tons	30	45	45	–
Train cubic capacity, cu.m	–	–	–	30
Train time, min:				
loading	170	170	170	470
discharge	114	114	114	450
Handling cost, kopecks				
per ton/km	1.94	1.88	5.2	–
per cu.m/km	–	–	–	5.2

Source
Soviet Export, 1/106/77; V. Volkov, Licensintorg.

XII. ENVIRONMENT

I have defined environmental technology as that which either (1) treats waste materials directly, or (2) eliminates or reduces the amount of environmentally harmful material which is produced. For example, a number of metallurgical technologies have as one of their features the reduction or elimination of by-products harmful to the environment or costly to dispose of. Since many of the group (2) technologies have already been discussed in detail I will only mention them briefly, isolating the feature(s) which have a positive environmental impact. In the majority of these cases the environmental aspect was secondary to the economics of the technology.

A. Technologies for Waste Treatment

(1) METHOD FOR TREATING EFFLUENTS FROM THE PRODUCTION OF ION EXCHANGE RESINS. License purchased by Zerolit of the U.K. (*Soviet Export*, 1/106/77)

(2) FPKM FILTER PRESSES. License purchased by Hoesch A.G. of FRG. One of the main uses of this equipment in Japan is for removing solids from waste water.

(3) MOBILE INCINERATOR VIKHR. The Vikhr is the name of a light weight mobile incinerator which can be used on land or on water. The Vikhr can burn black oil, fuel oil, lubricants, paint by-products, sewage residues, solvents, animal and vegetable fats, liquid and lump phenols, synthetic rubber by-products and other materials in mixtures with a water content of up to 65%. The Vikhr only needs fuel if the water content of the waste is higher than 65% or its calorific capacity below 3000 cal/kg in which cases the device needs either black oil or propane.

The Vikhr has no nozzles to clog and uses a combustion process that does not carbonize the residue. The incinerator is made of steel and lined with refactory oxide. It is serviced by one operator and has a maximum power requirement of 12 kwh per ton.

This technology is reported to be of interest to German firms. At least one U.S. firm has shown a very strong interest in this device, according to Dr. Dvorkovitz and Associates. (Technical description drawn from "Soviet Technology and Engineering Digest", p. 138.)

B. Technologies Which Reduce Or Eliminate Waste Put Into The Environment. (All of the below have been licensed in at least one Western country.)

(1) EVAPORATIVE COOLING OF BLAST FURNACES. This technology eliminates thermal pollution caused by disposing of blast furnace heated cooling water run through copper box cooling elements at the rate of 10,000 gpm. (U.S., Japan, U.K., Germany, France and others.)

(2) DIAPHRAGMLESS ELECTROLYZERS. Reduce chlorine discharge from electrolytic cells used in electrolysis of magnesium chloride. (U.S.)

(3) KIVCET PROCESS FOR SMELTING LEAN ORES. Eliminates need for expensive pollution control devices for waste gases. This is due to the high sulphur content of the gaseous discharges from the furnace which can be economically processed to produce sulphuric acid or pure sulphur. (Germany)

(4) DRY COKE QUENCHING. Eliminates air pollution caused by the discharge of harmful materials dissolved in water used to spray coke by the "wet" quenching process. (Japan, Italy, Spain)

(5) MICROSCALPER. This is a piece of equipment the Soviets have developed for cleaning mill scale from metal. It is virtually noiseless in comparison with other mechanical processes and is a substitute for pickling, the use of acids for mill scale removal. The disposal of the acids is increasingly a problem. (U.S., Japan, Germany)

(6) M-6. This is a special detergent developed for cleaning oil tankers. Purchased by a Swedish firm, the detergent emulsifies with oil, separating out into layers of oil, water and detergent. The oil and detergent can be reused and no oily detergents are put into the sea (Sweden). Source for this is J. Hjorth of the Axel Johnson Co., Licensintorg representative for Sweden.

(7) PNEUMATIC PIPELINE TRANSPORTATION. A method for moving bulk materials using compressed air pumped into pipes, this mode of transporting goods is noise-less and produces no pollutants. (Japan)

(8) TURBO COOLING MACHINE. This machine eliminates the need for freon and other cyrogenic gases. Operates on atmospheric air. (U.S.)

PART TWO
INSTITUTIONAL ASPECTS OF SOVIET TECHNOLOGY SALES

I. FROM INVENTION TO EXPORT

In the following section a short summary of the Soviet system of industrial property rights will be presented. There are several detailed sources on this subject available (see bibliography), one of the most recent being, *Invention and Innovation Under Soviet Law* by Manfred W. Balz.

Also described in this section is the process by which patents for the protection of Soviet inventions are sought, and the procedures for selecting technology to export.

1. Patents Versus Certificates of Invention in the Soviet System.

In the Soviet Union there exists a dual system protecting inventions and discoveries. The first and by far most important part of the system is provided by the award of a Certificate of Invention. This is, in fact, the only form of protection available to a worker in a state enterprise when the invention is made during the normal course of work. If the invention is made outside of his regular employment activities, the worker may file for a patent if he wishes. In this respect, the practice is similar to that of many U.S. corporations which acquire the right to employee related inventions, while privately-related and financed inventions remain the property of the individual.

Since the right to the invention is assigned to the State, the Inventors Certificate is a form of recognition which carries both non-pecuniary benefits and financial compensation in the event that the invention is commercially utilized, but no exclusionary rights. The size of the reward is computed according to the manner of exploitation up to a maximum of 20,000 R. The compensation is paid by the enterprise which uses the invention. If the invention is used by several enterprises of an industry the compensation is paid by the relevant ministry. If the invention is used by enterprises of different ministries, the ministry in which the invention was first utilized must compute and pay compensation, but may recover that part of its expenses that corresponds to the benefits accruing to other ministries.* The State also has an obligation to try to use the invention if it is economic to do so.

Under the new 1973 Statute of Inventions, Discoveries and Rationalization Proposals, bonuses up to $200 are now paid inventors upon issuance of a certificate. The introduction of a bonus apparently became necessary because inventors were often not informed by enterprises that used their invention, thereby receiving no compensation. Also, it usually took a long time before compensation was paid out, if at all.*

In addition to Inventors Certificates, Diplomas may be awarded for discoveries of a scientific nature, such as the discovery of a new atomic particle. At the other end of the spectrum, certificates are also granted for rationalization proposals which encompass such things as improvements in the use of equipment, suggestions to improve labor productivity or ideas for the more efficient use of materials or power, etc., but exclude proposals affecting the organization of administration *per se*.

While it is possible for a Soviet citizen to file for patent protection for inventions made outside of his employment activity, the practice seems to be rare and carries with it the burden of substantial costs. These costs take the form of filing fees, translation expenses (in the case of a foreign applicant) and annual payments of 150 rubles per year from the sixth through the fifteenth year of the patent. This is in contrast to applying for an Inventors Certificate in which case all costs are borne by the State. These conditions apply to foreign applicants as well as to Soviet citizens. Furthermore, a patent can be contested and annulled at any time during the period of protection, whereas a Certificate of Invention can be contested only in the first year.

Foreigners who apply for patent protection in the Soviet Union can under certain conditions restrict the field of use and prohibit export or foreign licensing of his invention by the Soviets.** Whether restrictions on foreign exploitation would also apply to a foreigner holding a Soviet Certificate of Invention is not clear. However, for restrictions to be admitted by a Soviet purchaser there needs to be a clear distinction between those products manufactured under license and those otherwise manufactured in the USSR. For example, if the Soviets have developed their own process for mak-

*M. S. Balz, *Invention and Innovation Under Soviet Law*, p. 55. D. C. Health Lexington Mass 1975.

*Ibid., p. 54.

**Gorodissky, *Licenses in USSR Foreign Trade*, NTIS Com 73-10736, p.16.

ing vinyl acetate from acetylene and acetic acid, a license agreement for making vinyl acetate from ethylene could not carry a clause limiting the export of the finished product.

There is also a division within the State Committee for Inventions and Discoveries (CID) which has responsibility for policing infringements on foreign patents. When new technology is introduced in the Soviet Union, the innovating enterprise has to submit to the CID a "license passport" which itemizes the various technological components of the new technology. These are reviewed to determine whether or not any elements may infringe on foreign patents. If an infringement is ascertained, then the enterprise may be required to compensate the foreign patent holder.* I inquired whether there were any documented cases where the CID had intervened on behalf of a foreign patent holder, but Mr. Solodov did not have any personal knowledge of this.

2. The Paris Convention For the Protection of Industrial Property.

In 1965 the Soviet Union became a signatory to the Paris Convention for the Protection of Industrial Property. Two basic principles were accepted by the signatories: (1) that each member grant to foreigners the same protection granted to its own nationals, and (2) a person filing in a member country has one year to apply in other countries during which time his application has priority and will not be invalidated by publication during the one year period. The latter (2) is the so-called "priority provision". This means that if a Frenchman files for a patent in France on June 21, 1975, his application has priority over a similar application made by a German on June 22, 1975.

He then has one year to file in member countries during which time he can publish about his invention and test its commercial potential without endangering the application through prior disclosure of the invention. Since 1966 most member countries have accepted the Soviet Certificate of Invention as equivalent to a patent. In 1973 the United States amended its law to recognize the Soviet Certificate of Invention as equivalent to a patent for purposes of the priority provision of the Paris Convention.** Soviet law has been amended to grant the priority provision and includes a six month priority protection for inventions shown at exhibitions. Also, in accordance with the Paris Convention, Soviet law was amended to provide protection for industrial designs, which was previously not the case.

3. Process of Applying for Foreign Patent Protection.

In most cases new technology is developed in either a research institute or industrial enterprise (which may also have its own research arm). Many of the larger enterprises and institutes have their own patent department where applications are prepared for submission to the State Committee for Inventions and Discoveries (CID) which has been receiving over 100,000 applications per year for the past 10 years. These applications for certificates are reviewed by examiners who use the same criteria regarding technological novelty and disclosure requirements as Western patent offices. In addition, there is the requirement that the invention has "utility" to the economy.

Among the inventions for which certificates are awarded certain ones are selected as having potential for foreign patent applications. These are sent over to the foreign licensing division of the CID. Further discussions are held with representatives of Licensintorg and the appropriate industrial ministry to decide whether and where the invention should be patented. These decisions are said to be based largely on defensive considerations relating to the likelihood of a given country being a future export market, rather than representing an active marketing decision.

If the decision is to patent, the enterprise or institute prepares the necessary disclosure material which is submitted to the USSR Chamber of Commerce. Through its foreign patent agents, applications in the respective countries are made. Total cost of applying for a U.S. patent runs around $200, on the average.

4. Selecting Technology to License.

Licensintorg is the Soviet foreign trade organization which specializes in the purchase and sale of licenses. Unlike other foreign trade organizations which specialize according to a general product category such as wood, tractors, medical items, Licensintorg must cover all potential areas of technology where a licensable process or product has been developed. It has six bureaus (Kontori), three for purchasing licenses and three for selling licenses. Total Licensintorg personnel is around 200. The three export bureaus are for (1) chemicals, food, medicine, (2) metallurg[illegible], and (3) electronic or electrotechnical items, which includes welding.

Licensintorg maintains contact with special departments in each of the industrial ministries. It is the job of these liaison offices in the ministries to bring to Licensintorg's attention technologies the ministry has introduced which look as though they have international competitive potential.

In conjunction with the State Committee for Inventions and Discoveries, a decision is made whether and where to apply for foreign patent protection. The decision as to technologies to be marketed is also a result of consultation with the appropriate ministry and the CID. The State Committee for Science and Technology must give final approval of Licensintorg's decisions about technologies to be offered for sale.

---

*Victor Solodov, US-USSR Trade & Economic Council, N.Y.C.

**However, the Convention requires that a choice exists between a certificate and a patent. Because under most conditions the Soviet inventor doesn't have a real choice, there is some uncertainty as to the interpretation of this clause. (See Manual of Patent Examining Procedure, Oct. 1975 p. 14)

While the formal system has been described above, new Soviet technology may come to Licensintorg's attention through a variety of informal ways, such as direct contact from personnel at research institutes or enterprises, or through foreigners who learn of new developments on their own and come to Licensintorg. In general, there appear to be multiple channels of information which can lead to a licensing agreement.

5. Methods for Selling Abroad.

Licensintorg sells technology by basically three methods: (1) foreign buyer learns of technology on his own and makes contact with Licensintorg, (2) contact with a potential buyer is made through a foreign marketing representative with whom Licensintorg has an agency agreement, (3) contact resulting from Licensintorg's own direct marketing efforts. These three categories could be refined endlessly but they seem to me to represent the principal means by which a customer finds out about Soviet technology. They are elaborated below.

(1) Learning of technology independently of Licensintorg. Though the list that follows is not intended to be exhaustive, it represents most of the methods that I have encountered. It should be kept in mind that in some instances Licensintorg itself may not know about the technology until the Western firm comes to it.

(a) *Industry literature or business contacts.* Articles about or reference to Soviet technology are read and pursued, or learned of from customers or competitors. The Andeo Corporation, Southwire Corp, American Magnesium are examples of companies which learned of Soviet technology in this manner.

(b) *Personal contact with Soviet scientists.* If a firm has good relations with the Soviet scientific establishment new technical developments may be learned of through direct personal contact.

(c) *Visits to industrial enterprises or research institutes.* While it is never possible to know for certain whether the things a person stumbles across on a plant visit are planned, Alcan (Canada) and Hager and Meisinger (FRG) both saw things which aroused their interest as a result of plant visits. Southwire Corporation, as a result of going to Karovobad to see the alunite plant in operation, saw other things which impressed them and may be subject to future negotiation.

(d) *Science and Technology Cooperation Agreements.* American Home Products' license to purchase carboxide, an insect repellant, arose from the contacts established under their agreement with the Soviet State Committee for Science and Technology.

(e) *Searching the Patent Literature.* Cabot Corporation learned of Soviet electro slag remelting of hollow ingot because they were working on the process themselves.

(f) *Conferences.* At such meetings the Soviet scientist himself may be an active promoter of his invention. Energy Sciences, Inc. learned of Soviet work in the development of electron beam guns at an international conference. The Soviet inventor was also a very active promoter of his work. Recently several U.S. companies have become interested in Soviet process control-related technology because of conferences arranged by Control Data Corporation.

(g) *Commercial Exhibits.* At exhibits arranged by Soviet foreign trade organizations, a foreign firm may see something of interest. If export of the item is not possible in a reasonable time frame, negotiations may be shifted over to Licensintorg.

(2) Contact through a foreign marketing representative. In this situation a foreign based company signs a sales representative or "agency" agreement (some companies avoid the latter term because they don't want to be referred to as "agents"). These may run from 9 to 42 months depending on the bargaining power of the foreign agent. Within the agreed upon time frame the agent will usually have the exclusive rights to market a selected number of technologies in a given territory.

While sales representatives operate differently, they can play a marketing role which is either active at one extreme or passive at the other, but is frequently a combination of both. In an active role the agent comes to Licensintorg or to an Institute with whom they have developed a relationship and say in essence "Here is what we need in the U.S. What have you got?" The passive role involves taking what Licensintorg comes up with, deciding if there is a market for it and marketing it. In either case, the agent may attempt his own analysis of the economics of the technology in order to sell it more effectively.

Getting useful economic data with which to make calculations is virtually impossible. Consequently, the usual approach is to try to get figures for physical inputs, such as kilowatts of power, labor, materials, and then to attach U.S. prices to those figures. As an illustration of the difficulties this can lead to, in trying to estimate the cost of a dry coke quenching installation, a U.S. company had to translate tons of instrumentation into an equivalent dollar value.

All negotiating is done by Licensintorg, the role of the agent being essentially to find interested customers. The agent may, however, assist in the negotiations.

Firms selected by Licensintorg seem to vary from companies which specialize in brokering technology (Dr. Dvorkovitz and Associates) to trading companies which take on selling licenses for the Soviets on the side (Satra, A. Hempel) to industrial firms (Reynolds, Southwire).

Finally, some technology is brokered through firms on a good will basis. A company which has a significant business with the Soviets can find that the Soviets will come and ask the company to help them sell something. The French firm, Cifal, for example, assisted the Soviets to sell their automatic wine champagnization process to Moet Chandon on this basis.

(3) Direct Marketing by Licensintorg. In order to avoid the brokerage commission Licensintorg will also try to sell directly, especially in situations where they already

have contacts at a firm which might be interested. This situation is the opposite of (1) in which foreign companies contact Licensintorg to ask about a technology they learned of independently. Here Licensintorg comes directly with a new technology to a potential licensee and/or carries out its own marketing compaign.

There are many variations among and overlap between these methods. It is not always easy to tell, nor has it been the main focus of this project, whether the agent played an important role in selling the technology. At least two companies with which an agent ostensibly played a role, did not mention the agents role in learning about the technology. Furthermore, there may be many phases to learning of a technology. A company may know about the existence of something, but not do anything until someone reaches out and brings more information. Also Soviet scientists who attend conferences have been known to distribute Licensintorg prepared material and, in effect, act as salesmen for Licensintorg. This occurred recently in Houston at an oil and gas technology conference.*

From conversations with licensees in the U.S. and Canada, the majority involved firms coming to Licensintorg for further information or to another foreign trade organization leading eventually to discussions with Licensintorg. Since Licensintorg does sell technology in all areas, the exhibits and marketing efforts of all the other foreign trade organizations effectively advertise for Licensintorg when high technology is involved. It is not uncommon for Licensintorg to offer a license for a product while another foreign trade organization is offering that product for export.

6. Export Control.

As a result of time limitations, I have not spoken with our own export control people to ask if the U.S. would sell the Russians the same things they are selling us and under the same conditions. Consequently, it is hard to be certain whether Soviet policies are more liberal than ours.

It would appear, however, that their approach is more flexible or broader than ours. Some examples:

- Electroslag hollow ingot technology provides technical and economic advantages in the production of starting stock for gun barrels and rocket engine casings among other things.
- Thin wall tube reducing mills for hard-to-work metals were purchased by Universal Oil Products to help fill an Air Force contract for hydraulic tubing. Carpenter Technology thinks there is a big future in the nuclear cladding market using HPTR tube mills.
- Advanced bonding technology using magnetic forces to be used for sealing nuclear fuel rods. Sold to Maxwell Laboratories.
- The Soviets have knowingly sold palladium for U.S. strategic stockpiles. They also sold chromium, platinum, titanium and other metals of military significance throughout the Viet Nam war.
- Licensintorg offered The Resource Sciences Corporation marketing rights to technology for their largest and newest BN 600 breeder reactor.
- Titanium from the USSR is used in the multi-role combat aircraft (MRCA) being built in Europe for NATO.
- Soviets have marketed in the U.S. high performance jet afterburners and a system for deicing aircraft which has been sold in England. The electroimpulse deicing system is lighter than conventional systems, uses 1/100th the power requirements and is supposed to be cheaper to manufacture.
- Aviaexport approved the use of YAK 40s by an American firm, ICX, bidding on a Coast Guard contract for surveillance planes.

It is my impression that many of these are items which the U.S. would be reluctant to sell to the USSR or only with strict controls over their use. The examples which I have cited fall into two categories: (1) those which have civilian as well as military applications, such as ESR technology or HPTR tube mills, and (2) those knowingly sold or made available for military or strategic purposes (such as the YAK 40 for the Coast Guard).

I can only speculate on the meaning of this as it relates to Soviet controls over exports. I have not talked with any Soviets in the U.S. who say they can speak authoritatively on Soviet philosophy of export control. Several considerations can be identified, however:

- The Soviets may not be organizationally equipped to monitor how the U.S. utilizes their technology. This is virtually impossible anyway in the case of raw materials.
- Desire to earn hard currency may outweigh, in their view, marginal military considerations.
- As recent advocates of the philosophy of international division of labor, it could appear inconsistent to restrict sales of raw materials which *might* be used for military ends.
- In the case of high technology such as magnetic impact bonding or breeder technology there is prestige in having Western countries use Soviet technology.
- The Soviets may generally have a broader view than the U.S. of considerations which affect strategic relations. This would make sense in view of Marxist ideology which sees the development of events in terms of inevitable historical forces.
- Possibly the amount of technology being exported is as yet too small to motivate an organizational effort aimed at controlling its sale or use.

Y. Malov and P. Malachin of the Soviet Trade Representation* expressed the view that trying to separate between military and civilian technology is a

*Conversation with M. Yhter, Intertex

*Y. Malov, Chief, Economic Division, Mr. P. Malachin, Economics and Trade Expert.

futile exercise since "pants buttons" can be considered of military value. With respect to raw materials of strategic value, Mr. Malachin thought denying them would only stimulate finding a way to do without such materials, or if possible the U.S. would simply buy the materials elsewhere.

The Soviets I have spoken with at Licensintorg and at the Trade Representation admit that there are things which are not sold to the West. These would be their very latest technological developments, presumably those with an obvious military use. The means by which decisions are made not to sell certain technologies is unclear. The Russians I have spoken with all say that there is no such organization equivalent to the U.S. Export Control Administration. On separate occasions the Russians with whom I have discussed this subject say that the decision to classify, and presumably restrict export, is a local one made at the research institute or enterprise where the invention or development occurred. The theory seems to be that the developers are in the best position to know the state of the art, what is available in the rest of the world, and the strategic importance technology. There may be several review stages at the institute but the decisions apparently are made on a decentralized basis.

Thus, it would seem that whatever Licensintorg or other foreign trade organizations have in their portfolio represents technology which is not considered secret and therefore can be sold even if it has potential military applications. Based on the information I have received, there is no central body charged with determining whether X, Y or Z would add to the U.S. military capability or be to the strategic advantage of the United States.* It appears that whatever is not classified is saleable.

7. Mechanisms For Technology Transfer.

Technology can be construed broadly or narrowly, depending on one's perspective. Ultimately technology involves information. The quality, quantity and accessibility of the information determines how much one is willing to pay. As Martin Packard, Vice President for Research at Varian Corporation, views technology transfer, the purchaser is essentially buying someone else's decisions. The more times a product has been manufactured, or the longer a process has been in use, the more decisions have presumably been made aimed at optimizing the performance of the technology. This reduces the likelihood that by tinkering with it the purchaser will improve it. A firm pays more for a technology that has been reproduced 1,000 times than twice.

In this framework, technology can be defined by contrasting it with basic research. Whereas basic research is aimed at increasing our knowledge of fundamental principles, technology relates to information resulting from efforts to apply known principles to a practical end. As such, this information can have many dimensions, from laboratory test data about the performance of materials under various conditions to engineering drawings, operating manuals, or manufacturing know-how.

Taking this broad definition, Soviet technology can be transferred in many ways. Yuri Yanov's article on program proving which was translated in 1964 by Rutledge of IBM and the many Soviet technical articles and books translated into English illustrate one form of transferring technology. If read by the right person(s) published material can be valuable and cost little. Observation also can be a means of transferring technology. This can occur by having ideas stimulated or by seeing something done that one didn't think was possible. American engineers didn't think it was possible to design air-tight coke ovens until they went to the USSR, according to Stewart Fletcher of the American Iron and Steel Institute. Knowing that something is possible, a firm can then set people to work on finding a way to do it.

All of the above relates to technology which is more or less public information. Descriptions follow of organizational mechanisms for transferring technology that has a price tag on it or some equivalent.

(1) ***Straight export.*** Turbo cooling machines, ESR hollow ingot equipment, K355 flash butt welding head, peat equipment fall into this category. Start-up technical assistance plus maintenance and operating manuals are usually part of the package.

(2) ***Straight licensing.*** Usually involves technical documentation and know-how, plus patent rights; frequently equipment as well. Often just know-how as with Maxwell Laboratories magnetic coil technology or Texas Utility Services Inc. acquisition of *in situ* coal gasification technology.

(3) ***Contracting for the Soviets.*** In one instance, a U.S. firm was hired to deliver computer hardware and develop software for an automated system of neutron activation analysis. In the process of trying to meet Soviet contract specifications the Soviets themselves made an important software contribution. Furthermore, the U.S. firm, as a result of this contract, is now in a position to offer technology in the U.S. which was not previously available. (case history follows)

(4) ***Joint Venture.*** Joint ventures can arise from a successful joint R&D effort (which might result from an S&T agreement) or from a pooling of resources (Kaiser Resources Ltd). Marconi Instruments of England and Nuovo Pignone of Italy both have licenses which were apparently the product of a joint development effort with the Soviets. I have no first-hand knowledge of either, however.

(5) ***Joint Manufacturing.*** Soviet pneumatic rapier looms have been sold to European companies using Swiss or German dobbies and Jacquards.

(6) ***Joint Bids.*** Soviet bids with Westinghouse, Braun Boveri and Allis Chalmers for hydroelectric projects

---

*The Soviet Union suspended shipments to the U.S. of chemicals used for defoliants in Viet Nam. However, this was due to a strike by workers who learned of the end use of the chemicals, not a government decision (according to a Western trade partner of the Soviets who handled the shipments).

may provide an effective vehicle for combining Western and Soviet technology.

(7) *Protocols.* One example of successful technology transfer has occurred under the umbrella of an innovative protocol agreement between Perkin Elmer Corp. and the Department of Analytical Chemistry of the Leningrad Polytechnic Institute. This has resulted so far in the acquisition by Perkin Elmer of an accessory for its atomic absorption spectrometers which has been commercially very successful. This arrangement is described below in detail.

CASE HISTORIES

PERKIN ELMER CORPORATION

In 1976, the firm of Perkin Elmer signed a protocol agreement with the Leningrad Polytechnic Institute which provides an example of another institutional arrangement for transferring technology. Currently, the agreement is structured in the following manner: Perkin Elmer has free access to the laboratories and personnel of the Department of Analytical Chemistry of the Leningrad Polytechnic Institute. This includes access to ideas, inventions and developments of any kind which are of interest to Perkin Elmer. Any equipment which Perkin Elmer brings to market based on information received from the Department is free of royalties or payments of any nature and is acquired on an exclusive basis. In turn, the Department of Analytical Chemistry can receive free for its own research and teaching purposes Perkin Elmer equipment relating specifically to the field of atomic absorption spectrometry. This equipment is used for detecting and measuring trace elements in substances at parts per million and has important applications in chemical research and quality control.

This agreement contains three potentially valuable elements from the Corporation's standpoint. First, Perkin Elmer may learn of new instruments or accessories to instruments being developing by researchers at the Institute's Department of Analytical Chemistry which are applicable to its market for chemical research equipment. Second, by having their equipment used by researchers and students at the Institute, Perkin Elmer may learn of new applications of its own equipment. In this event, manuals and necessary operating instructions would also be received by Perkin Elmer. In the case of new equipment developed by Perkin Elmer, its use by the Institute may also assist in the debugging of the instruments. Third, by having students at the Institute trained on Perkin Elmer equipment, Perkin Elmer hopes that after they become teachers and professional users they will have a bias in favor of Perkin Elmer when they come to order atomic absorption spectrometers.

Since the protocol was signed in 1976, Perkin Elmer has put into production an accessory to its atomic absorption spectrometer which already has had improtant commercial results. Perkin Elmer purports to have 85% of the world market in atomic absorption spectrometers. Researchers at the Department of Analytical Chemistry have designed a graphite furnace (6" x 6" x 9") which vaporizes samples inconvenient or impossible to analyze in solution form. By enabling users of their atomic absorption spectrometers to vaporize samples, accurate data analysis can be done where previously not possible and altogether new applications are feasible. The effect of the graphite furnace accessory has been to expand the market for Perkin Elmer atomic absorption spectrometers, a trend which Perkin Elmer believes has considerable growth potential.

Under the terms of the protocol Perkin Elmer received the information and proprietary know-how necessary to build and operate the furnace. This device is the only practically workable one of its kind known to exist. Perkin Elmer, in turn, has already assigned equipment to the Institute.

Experience With the Soviets

Perkin Elmer reports that the spirit of the protocol agreement has been implemented very satisfactorily to date. Their specialists have been able to freely look around, have access to Department personnel, new equipment and ideas.

SOURCE: R. Scott, Chief Scientist, Perkin Elmer Corp.

CODEVINTEC PACIFIC, INC.

Background

Codevintec Pacific is primarily a systems engineering company specializing in the development, manufacture and installation of computerized instrumentation systems. It was established in 1971 as the U.S. representative of Compagnie Olivier, a French trading firm with a history of doing business in Eastern Europe and the Soviet Union. Codevintec, intending originally to develop business with Japan, faced long procurement cycles and slowness in getting orders, and therefore extended its reach to the Soviet market.

Currently, an important segment of Codevintec's business comes from the Soviet Union. Some of the systems under development are considered novel in their application or have features which don't have a counterpart in the United States. From the standpoint of the reverse technology transfer potential inherent in these contracts, neutron activation analysis provides an instructive example.

Neutron Activation Analysis

A major new application of an old idea which derives from Soviet work already in progress, and which Codevintec has been contracted to upgrade, is the use of neutron activation analysis for industrial and agricultural use. Neutron activation analysis is a well-known laboratory procedure for detecting and measuring trace elements in materials at parts per million. This involves

fast neutron bombardment of a sample and recording and analyzing the gamma ray spectrum produced by the mildly activated sample. However, equipment developed for scientific use permits analysis of only 20-30 samples per day. The Soviets have recognized a variety of applications where it would be useful to increase the accuracy and speed of content analysis of materials.

One of three applications for which Codevintec is developing NAA systems is grain selection. Through soil analysis of nutrients (especially nitrogen, potassium and phosphorous) and toxic substances, together with consideration of external variables (disease, climate, etc.) optimum selection of fertilizer and crop combinations can be determined in order to increase yield. In comparison with other available methods 14 MeV fast neutron activation claims several advantages: it requires minimum time for sample preparation, provides simultaneous element analysis, and is faster and nondestructive.

The Soviets reportedly see this as a tool for their Virgin Lands program as well as for enhancing crop yields elsewhere. Currently the Soviets have developed equipment and software for processing 50 samples per day. Codevintec has been contracted to put together a hardware and software package for processing 500 samples per day. Other applications for which Codevintec is developing systems is for analysis of impurities in oil and in water.

Codevintec believes there is a large potential market for NAA, both for agricultural and industrial applications. Some promising applications include analysis of protein content of foodstuffs, monitoring of oxygen and silicon content in metals, identification of water pollutant sources, pesticide residue measurement in crops or foodstuffs, monitoring of lead content in paint production and many other uses. Evidence of Codevintec's interest in developing this technology for domestic or international markets is reflected by the firm's own investment of resources in improving these systems and identifying new applications beyond those called for in their contract.

Experience To Date

Though Codevintec was contracted to provide a total systems package, the Soviets have apparently made significant contributions to the development of the software which have assisted Codevintec in reaching the 500 samples per day throughput required by the specifications. Unassisted, Codevintec .engineers reached a throughput of only 300 samples per day. The Soviet contribution stemmed from their approach to data analysis which made possible reaching the 500 samples per day required by the contract. Unlike the U.S. habit of averaging data around a linear function, Soviet programmers curve fit spectrum data permitting greater accuracy and throughput. The Soviets have also developed different techniques for eliminating nuclear interference arising when different elements emit identical gamma ray spectra. The importance of the Soviet part in developing the software for NAA is reflected by Codevintec's agreement to pay the Soviets a royalty for each system delivered to the USSR (though not for sales to other parts of the world).

There is also a gentleman's agreement with the Institute that they will provide Codevintec with information about operating improvements and modifications (debugging of software) based on one year of on-line utilization of the systems. This will amount to an equivalent of 12 man years experience.

SOURCE: William Buford, President, Codevintec

II. EXPERIENCES WITH THE SOVIETS AS LICENSORS

Buying a license from Licensintorg involves four basic steps:

(1) Finding out about the existence of a technology.

(2) Obtaining the additional information necessary to determine if interested in buying.

(3) Negotiations themselves; agreement terms.

(4) Contract fulfillment, especially transfer of agreed upon know-how, technical material, et cetera.

I have already mentioned the various ways which Soviet technology can be brought to the attention of companies (1). In this section I will make some general comments about Soviet licensing practices (3) drawn from the experiences of firms with which I have spoken. I will then summarize experience with the Soviets as it relates to contract fulfillment (4). The process of obtaining additional information needed to reach a buy decision (2) will be discussed in another section of the report concerned with difficulties and limiting factors.

1. Role of Licensintorg.

A license agreement entails three principal actors on the Soviet side: Licensintorg, a ministry and an enterprise or research institute. Licensintorg is the legally responsible entity with whom a buyer signs a contract, despite the fact that Licensintorg has no technical capability of fulfilling the contract. In the negotiations Licensintorg usually plays a dominant role in determining the commercial terms.

Before any license agreement is signed it must be initialled by the appropriate ministry. It is then the ministry's responsibility that the enterprise or institute follows through on its commitment to deliver technical information. The enterprise or institute which developed the technology in turn assembles the necessary documentation and sends to the licensee whatever technical assistance is agreed upon. The institute also provides the technical input to the negotiations.

Licensintorg is not always involved in the transfer of technology. In cases where a transaction involves a large amount of equipment deliveries the technical assistance component may be handled by the same foreign trade organization making the equipment sale. Whether the know-how component is broken out separately depends on its relative importance to the whole deal. This also applies when the Soviets buy technology from the West.

2. Terms

Generalizations about terms are difficult to make. The requirements of licensing demand a certain amount of flexibility. On this score the Soviets appear to get a passing grade, but just barely. One limiting aspect of the discussion below is the absence of any comparative information. This makes it difficult to know to what extent Soviet practice is different from other countries. Nevertheless, I will present my impressions as they relate to (a) pricing and (b) payment terms.

(a) Pricing. Among Westerners the most common complaint about the Russians is their tendency to require unrealistic down payments. Whether this is a conscious tactic or reflects uncertainty as to what their technology is worth is difficult to say. It is probably both.

The Japanese are also said to start off with very high asking prices. One effect of the Russian approach is for some firms, especially those which are small and inexperienced in dealing with them, to be frightened off altogether.

How the actual asking price is established is not clear, but there is a definite sense among some Americans and Europeans who have dealt with the Russians that they really don't know what their technology is worth. Some of the problems they have seem to include:

- General uncertainty as to what new technology is worth, especially for new products, a problem shared by Western firms as well. Not a specific Russian problem.
- Failure to appreciate the costs of bringing a new technology onto the market.
- Unfamiliarity with the latest competitive alternatives to their technology.
- General weakness in appreciating the element of market risk.

Nevertheless, Licensintorg does apparently have formulas for establishing a base lump sum price. These formulas attempt to estimate unit prices and volume of output but ultimately reflect their own judgment as to the sophistication and complexity of the technology. Other aspects affect price as well: security of patent protection, amount of technical assistance, scope of documentation, exclusivity, degree to which technology has been fully proven in the USSR and other considerations. Furthermore, the size of the lump sum price is said to be dependent on the length of the payment period. If it is broken up over a number of years, it will be more than if paid up quickly. There is also supposed to be a relationship, which would also be standard, between the size of the lump sum and the future royalty payment. In the final analysis, the price and form of payment is negotiated based on the purchaser's estimate of what it is worth to him and his ability to pay.

In general, it seems that Licensintorg's approach is to try to charge whatever the market will bear. Firms which buy their technology relatively late in the game may also have to pay more than those who bought early. This is not unreasonable, if one assumes that over time improvements and greater experience with the technology is acquired.

A common problem characteristic of inventors is to overestimate the value of their inventions. The Soviet inventor is not immune from this syndrome and it is probably compounded by isolation from the business reality of the Western marketplace. No invention is really worth anything until it has made some money, but this is something not easily appreciated by Russian or Western inventors. Licensintorg, which has people who are closer to Western economic reality, is sometimes perceived by Soviet scientists as giving away their technology.

(b) Payment. There are several basic arrangements for payment common to the license trade. These include:

- Lump sum payment - annualized or paid all at once.
- Lump sum with annual minimum commencing after an agreed upon time.
- Lump sum with royalties paid when and if commercialized, and no annual minimum.

There are, of course, endless variations on these basic methods. The Russians use them all, but have a propensity for asking large down payments.

Payment of all or a part of the fixed payment is generally made on a performance basis. A certain amount is paid upon signing the agreement. Another amount is paid upon delivery of documentation, prototype and/or other information, and payment of another sum is made after successful verification of data or start-up, et cetera.

Based on my conversations with U.S. licensees, it seems the Russians can be capable of flexibility once they understand the situation of the buyer. For example, the drug companies are unwilling to pay large fixed sums because of the years of additional testing necessary and uncertainty about FDA approval of the drug. After buying a drug license from any country, it can be 4-5 years before a product is marketable.

A firm which purchased technology to be used in the nuclear power industry faced uncertainty and long delays associated with getting the new welding technology approved by the U.S. government. This firm was also successful in getting the Russians to take a long term view and go for royalties with a relatively small down payment.

3. Contract Fulfillment - The Transfer of Technology

The transfer of technology via a licensing agreement can entail process know-how, engineering drawings, test data, materials specifications, as well as technical assistance in the form of so many man-hours of Soviet personnel on site.

The experiences of the firms with whom I have spoken fall into two broad categories: (1) those which were satisfied, in some cases highly satisfied, with the quantity and quality of information received, (2) those who felt the Soviets honored their contractual commitments only if one took an extremely literal interpretation of the wording of the agreement.

Once again, without a more structured study of this specific aspect of the overall subject, and lacking comparative data, it is difficult to know how the Soviet record stands up against U.S. experiences with other countries. Nevertheless, there could be one idiosyncratic element in the Soviet system which may work against total customer satisfaction on the question of disclosure. One German firm, which would fall into category (2) believes that Licensintorg is constantly on guard that the technical people at the institutes don't transmit more information than they are required to. Licensintorg's job is to try to make as much money as possible from Soviet technology, but doesn't possess in-house the expertise to really understand all the technical aspects of a given agreement. However, Licensintorg is the gate through which all information from the enterprise or institute to the customer must pass. This German firm has the impression that Licensintorg personnel may edit out technical information which seems to them to be outside of the agreement's scope. However, without real understanding of the technical detail, they may excise crudely and to the disadvantage of the customer. In this view, the institutional imperative of Licensintorg is to seek opportunities to make additional information the subject of a new agreement, but without the expertise to judge what should or should not be filtered out.

Offsetting this experience is that of several American firms which were highly satisfactory. For instance, Texas Utilities Services, Inc. not only received everything they expected but had to turn away information. TUSI received many volumes of information going back over a twenty year period relating to gasifying coal in the ground. This information had to be pulled together for TUSI specifically and was a massive job. Institute personnel (VNIPROMGAZ) were even offering drawings of the lighting circuits in the building used at coal gasification sites. The job was described by TUSI president, P. Brittain, as highly professional and thorough. Maxwell Laboratories, Allied Steel and Tractor and other American firms report similar satisfaction with what they received under their agreements.

The contradictions implied by the experiences of the German and some American firms as against that of Texas Utilities and others can be easily explained if one doesn't view the Soviet system as monolithic and invulnerable to the vagaries of personality. What the German firm suspected may occur; that is, some individuals at Licensintorg may take a niggardly attitude about transmitting information, whether motivated by fear of giving too much away or the desire to get more money out of the licensee. The response is very plausible. However, the attitude, competence, and zeal of the people at Licensintorg presumably vary (and in fact are said by many Westerners to vary greatly) and this can explain in part the different experiences of Western firms. The other element is the skill of the Western firm both

in negotiating an agreement and in developing friendly relations with the personnel at the institute who actually have to do the work.

Indeed, the quality of personal relations, particularly with the Soviet scientific people, seems to be an important consideration. The technical documentation which institute personnel has to prepare for the customer is all extra-plan work. The professional pride these scientists take in their work and their desire to please can be influenced by their regard for their counterparts at the customer's firm.* Another important consideration affecting a firm's experience is the sophistication of the Soviet institution providing the documentation and prior experience it has had with selling technology.

Equally important is a widespread view that it is very difficult to get the Soviets to agree to changes or modifications after an agreement is signed. In other words, it is very important to think of all the details before the agreement is signed and that little should be taken for granted or left for settling afterwards. Aside from the lack of a common framework or set of assumptions about the way business should be conducted, the Soviet decision making process requires getting many different organizational inputs. Hence, when negotiating with the Russians one U.S. corporate president may sit opposite a whole committee of Soviets. Each person represents a different organizational interest in the outcome of the transaction. These people must reach a modicum of agreement among themselves for an agreement to be signed. It is this committee approach of the Soviets to negotiating which, if not fully appreciated by the Western firm, can lead to problems during or after the negotiations. As a result of the numerous organizational actors required to negotiate, there is presumably a strong systemic bias to stay with an agreed upon set of rules, thereby reducing flexibility after the fact.

*As J. Weiman, Chairman of Energy Sciences Inc. put it, scientists like to think their inventions will "go to a good home."

III. LICENSING VERSUS EXPORT

Listed below are a number of reasons which may explain the Soviet decision to license rather than export. In any individual instance the mix of reasons can differ. Therefore, the list is an effort to cover the range of possible reasons.

1. ***When either pure process technology or concept technology*** is involved, export is ruled out. Technology transfer involving techniques for gasifying coal in the ground or roasting alunite simply can't be exported in the usual sense of the word. Certain other process technologies for which there may be a large market, such as various ore smelting technologies, could be exported in the form of providing technical assistance and engineering services in the same manner as a company like Bechtel. However, this presupposes a well developed marketing and customer service capability. In other cases the technologies may require further development before they can be brought to market. In these cases the Western firm is buying what it believes is a good concept. The surgical stapling gun is an example of this.

2. ***Organizational limitations*** are an important consideration. There are several pieces to this: (a) lack of market access, (b) difficulties with customer service, spare parts, et cetera, (c) resistance among manufacturing enterprises in the USSR to export manufactured goods for the Western market. In addition to the more rigorous standards their output must meet and the need for after purchase service, selling to Western customers requires an unaccustomed flexibility and adaptability — green instead of red paint, a handle placed here rather than there, et cetera.* Illustrative of this problem was the Soviet failure to sell thousands of microscopes to the Boston school system. Boston schools wanted a fixed eye piece, rather than a detachable one. The Soviets could not or would not make this change.

3. ***Internal needs*** as well as limited current capacity appear to be important considerations in the decision to license. There is a vast market of unmet needs within the USSR. Using new capacity or diverting current capacity for export can be avoided by selling a license.

4. ***Volume*** may not be judged sufficiently large to justify setting up a special production line for export.

5. ***Tariffs*** on some manufactured items can put their product at too great a disadvantage to compete despite frequently much lower prices.

6. ***Practical considerations.*** For example, transportation problems can influence a license versus export decision. The Soviets are currently trying to decide whether to license or export to the United States all glass insulators for electrical transmission. Lack of adequate packing material for transporting the insulators by ship is hindering ability to export and could result in a decision to license.

7. ***Prestige*** is another element, the importance of which is hard to judge. Exporting a product normally earns more hard currency in the long run than licensing, though the start-up costs can be higher. Furthermore, the Soviets may be giving away an initial technological lead by selling licenses to Western firms which normally would be expected to run faster and further with a new idea. Selling licenses, however, may be viewed as a way of waving the technological flag in lieu of exporting embodied technology.

I share the judgment of a German experienced in this field which is that lack of market access and customer service capability together with internal demand requirements are the most important deterrents to exporting embodied technology.*

---

*N. Smelyakov, Deputy Minister of Foreign Trade, likens Soviet manufacturers to the cuckoo-laying its eggs in the nest of other birds, pushing the care of its progeny onto others. For a very illuminating discussion of this see "Business Meetings: Comments by the Deputy Minister of Foreign Trade", Novy Mir No. 12, Dec. 1972, or JPRS 61148.

*Henning v. Eichel-Streiber, Prokurist, A. Hempel (FRG).

IV. MOTIVES OF SOVIET LICENSEES

Discussions with licensees do not indicate that the reasons firms buy licenses from the Soviets differ significantly from the usual reasons for buying a license. While there are a few added wrinkles, it is not my impression that they amount to anything which alter my judgment on this question. Naturally people or institutions can do things for more than one reason and there are certainly indications that in a number of cases more than one consideration was behind the decision to buy a license. My impression was that the firms I spoke with were quite direct in explaining the reasons why they bought the license. In any event, that is the assumption on which I am operating.

In general, firms buy a license either because they have to in order to use a process or product they have developed themselves, but for which someone else holds the patent, or because someone else has figured out a better way of doing something that holds the potential for economic gain. In the former instance the threat of a suit motivates a license agreement which may involve nothing more than acquiring the patent rights. In the latter, avoiding the repetition of what someone else has already done, or taking advantage of a new idea, is the underlying motive. There are also instances in which a firm will buy a license to acquire the rights to a potentially threatening technological development to prevent a competitor from getting it.

Of the 37 license agreements about which I know something, the motives can be grouped into three categories:

(1) Potential for economic benefit (30)
(2) Political/mixed (5)
(3) Soviets have prior patent position (2)

Potential for economic benefit. Economic benefit can arise from at least three situations described below, which give rise to license agreements. These are not mutually exclusive.

(1) A firm may buy a license when the licensor has developed a technology which helps reduce the operating costs of the firm or meets some other current internal need. Alumet Corp. bought a license for a part of the process for making alumina from alunite because the Soviets had already solved a problem Alumet was working on. American Magnesium had to re-equip their plant in Snyder, Texas, as part of an effort to reduce operating expenses. The Soviet electrolytic cells met their requirements. Vereinigte Chemische Fabriken of Austria was considering introducing continuous processes for manufacturing resins and learned that the Soviets already had developed a process.

(2) License may be purchased because it will extend a firm's market capability or provide it with a more competitive product than before. Energy Sciences, Inc. was interested in the Soviet electron beam gun because it would have given the firm a competitive entry into a higher energy market such as irradiation of cable insultation. Andco Corp. bought the evaporative stave cooling license to be able to offer its customers the latest technology in blast furnace cooling design. Allied Steel and Tractor thought the Soviet pneumatic drill would enable them to compete in a field where they were not active, but had the marketing capability to expand into.

In these and other instances, the Soviet technology fitted into or complemented the technical capability and market expertise of the firm.

(3) A license may also be purchased because it offers a new, competitive concept for doing something. Additional development is frequently required here. The Soviet stapling instruments provide an example of a sub industry created on the basis of a new approach — in this case, stapling rather than sewing tissue together. Joy Manufacturing's Hefti Hammer, Fenn's microscalper, and Terraspace's water cannon are also examples of new approaches to solving problems. Currently, a Washington firm is trying to raise venture capital to develop a business using the Soviet method for making fiber from basalt rock.

Political/Mixed. In two cases the firms I spoke with were quite candid about the ulterior motives for buying a license. In one instance where simultaneous, multiple purchases were involved, one of the purchases was made to keep happy a key Soviet scientist who had developed a product he valued highly. Another firm openly admitted that it bought a license in order to get a relationship going with the Soviets. In one instance, a government policy of developing better trade relationships with the USSR may have influenced the firm's decision to buy a license. In another situation, a German firm which had a significant business with the Soviets was frequently approached by them to buy something. When the Soviets finally came up with a technology which did look promising the firm was happy to try to accommodate. However, the license was purchased only after waiting two years for the Soviets to offer reasonable terms.

In the case of Koenig and Bauer, a German manufacturer of printing presses, a license was purchased from the Soviets in order to satisfy *Izvestia's* requirement that presses sold to them in the future have an automatic folding device which had been developed in the USSR.

In situations where a company has a substantial business or hopes to develop a bigger business with the Russians, buying something from them can be seen as a method of keeping or developing a good relationship. Nevertheless, it is my impression that if firms feel obliged to buy something from the Russians it is much simpler and less time consuming to buy straight product. These counter-purchases occur frequently. Buying a license, more typically, appears to be based on merit. Over time, the record of the firm in utilizing the technology will speak for itself, although abandonment doesn't necessarily imply impure motives. Furthermore, trying to buy a license from the Soviets can often be a time consuming and exasperating experience. Two persons experienced in this field have said that for a firm to try to buy a Soviet license it must think the technology offers some significant advantages.*

Soviets Have Patent. One U.S. firm, and I strongly suspect Vereinigte Edelstahl Werke of Austria (Gebrueder Boehler), bought licenses from the Russians to avoid patent litigation. There has been a longstanding suit out against Gebrueder Boehler by the Paton Institute for patent infringement and I suspect that the license agreement signed last year was a form of burying the hatchet. Cabot Corporation was developing an electroslag remelting process for making hollow ingots when they learned from a search of the patent literature that the Russians already had a patent on the process.

---

*David Bier of Bier and Sons (U.K.) has commented that some British companies consider it easier to sell to the Russians than to buy from them.

V. CONSIDERATIONS WHICH INHIBIT THE SALE OF SOVIET TECHNOLOGY

A German patent lawyer, Alexander V. Fuhner, who works closely with Licensintorg believes the Soviets could increase their sales of technology in Germany by 50 percent through more effective marketing and organization. A Washington patent lawyer, Martin Fleit, who also has Soviet clients, has said they could sell "a hundred times" as much technology as they do if they were better organized. Dr. Dvorkovitz and Associates, a firm which specializes in brokering technology worldwide, thinks their firm could have sold "ten times" the number of Soviet licenses they have to date if the Soviets could respond more effectively to interested parties. All of these figures — ten times, one hundred times, fifty percent — were off the top, unsolicited conversational numbers. Because of their spontaneous nature, I believe they are particularly significant, although not to be taken literally. However, I have not met one person involved in trying to sell technology for the Soviets who I believe would disagree with these sentiments.

The following section outlines a variety of reasons which impede Soviet efforts to sell technology. It should be kept in mind that the difficulties described can act cumulatively as well as separately.

(1) **Poor organization of their total selling effort includes:**

(a) *Inadequate presentation of information.* Advertisements are often very sketchy and poorly written from a technical standpoint. As one critic said, "you have to have a lot of curiosity to pursue further information presented in some of their advertisements."

(b) *Response time to customer requests for information, samples, et cetera, is slow.* Once a potential customer reads or hears of something interesting, he wants to know more. Additional information is either very slow in coming, comes in drips and drabs, or never comes at all. As timing is a critical element in selling technology, or selling in general, this is a serious weakness. This is the most frequently mentioned reason for lost sales.

(c) *Negotiating tactics often lose interested parties.* The propensity of Licensintorg to ask for what are viewed as unrealistically high down payments can and does kill the interest of potential customers.

(d) *Poor coordination between their licensing and patenting efforts.* Patent applications are often abandoned, applied for too soon, poorly written, cover the wrong points in the invention, invalidated by prior publication or otherwise mismanaged. Ideally a patent should be in the application stage at the same time license negotiations are underway. This is because it is possible to modify the patent as long as it is still in the application phase. Once it has been issued, then it is final and can't be changed.

The inherent flexibility of a patent together with unpredictability of how inventions might ultimately be used makes it important to take advantage of this flexibility to the greatest possible extent. In the Soviet system, filing for foreign patent coverage is done by the USSR Chamber of Commerce, the selling is done by Licensintorg, and the inventor who understands the technology may be in deepest Siberia, but in any event has yet a different institutional affiliation. These parties ideally should work closely together.

(2) **Logistics.**

(a) *Travel.* Merely getting back and forth is difficult and frought with uncertainty regarding visas, travel dates and scheduling, all of which can lead to a great deal of frustration. These problems apply as much to Soviets who have to request permission to visit the West as they do to Westerners going to the USSR.

(b) *Access.* Access to plants or installations where the technology may be observed in operation can be a problem. Alone or in conjunction with other things, inability to see the technology in operation can end a customer's interest.

(c) *Communications.* Doing business with the Soviets can be hampered by time consuming translation requirements, often noted reluctance of the Soviet trade organizations to write letters* and general language and communication barriers (does the same term "mean" the same to a Russian and an American?).

(3) **Difficulty evaluating their technology.** Because of inability to get meaningful cost data and the different economic environment in which Soviet technology functions, it is frequently hard to judge whether what appears to work there will work in our system, economically as well as technically.

Furthermore, on occasion the Soviets are thought to introduce technology which doesn't make economic sense, at least in the short term, but has prestige value, such as the laser-based telephone system used in parts of Moscow.

---

* One person reported that mail from the USSR was not addressed to any individual in the company, so it would bounce around the mail room for weeks without people knowing to whom it should go.

This particular facet — evaluating Soviet technology — raises difficult questions that are beyond the scope of this project. Suffice it to say evaluating Soviet technology is a problem for purchasers, but also complicates the selling efforts of Licensintorg. The fact that in their system the level of demand for a given type of output can be controlled is one example of an institutional difference which may allow them to do things that we cannot. As a result the Soviets may offer technology which is good and makes economic sense in their environment but wouldn't make economic sense in ours. Consequently, it can be a waste of their time to try to sell. As an illustration, the Soviets fully heat treat 65 percent of their railroad rail and they are aiming for 100 percent. Heat treated rail is harder and lasts longer than untreated rail. I have spoken with a metallurgist* for the American Association of Railroads who believes that the Soviets would have difficulty selling their technology in the U.S. even though only 5 percent of our rail is fully heat treated. The difficulty stems from the fact that the initial investment cost for heat treating equipment is high and with five steel companies producing rail, the market wouldn't be big enough for any one company to justify the investment.

Though this example has not been thoroughly researched, it does suggest that the Soviets may develop technology associated with economies of scale and planned demand which aren't realizable in the U.S. Another way of looking at this same issue is that in our system flexibility is required to meet changing market needs and to cope with strikes. Certain technologies which are developed in their system may not be suitable in one which demands rapid adaptability and imposes harsh institutional consequences for wrong decisions.

(4) Technology frequently requires further development before commercially usable. Technology offered by Licensintorg often requires further development but this doesn't necessarily make a difference to the purchaser if the basic idea is good enough and the price is right. Mainly, it is important that the buyer recognizes how much additional development is needed and bargains accordingly.

*Dan Stone, metallurgist at the Chicago office of the AAR.

Problems can occur, however, when promotional material leads interested parties to believe something is in a commercial state. This may reflect a coordination problem as well as oversell. The only instances I have learned of Soviet unwillingness to sell a technology have occurred when Licensintorg offered an item and then the institute or enterprise said they weren't ready to sell because more work on it was needed.

To the extent that their technology does require further development, the market for their technology is limited to firms which have a considerable amount of expertise in the field and can take it further.

(5) Anti-Soviet Prejudices and "Not Invented Here" Syndrome. Where the NIH factor is strong anyway, it is likely to be compounded by the Soviet origin. The importance of anti-Soviet attitudes as a hindrance is difficult to gauge, and clearly varies among companies, but is a factor to be considered.

I have enumerated a set of reasons which inhibit Soviet efforts to sell their technology. Though my remarks center around Licensintorg, I am inclined to believe the situation is similar among other foreign trade organizations, especially those handling high technology items — Energomashexport, Machinoexport, Mashpriborintorg, Techsnabexport, and others. Many of the difficulties mentioned can act cumulatively and result in a great deal of frustration. This means that even if a deal is made and especially if the Soviet follow-through on the contract is less than satisfactory, it is unlikely the customer will eagerly come back looking for more technology to buy.

It would be inaccurate, however, to leave an overly negative impression. While patience and persistence seem to be always necessary in doing business with the Russians, a number of firms with whom I spoke clearly had satisfactory experiences in terms of the negotiations, contract fulfillment and commercial success. There is no substitute for bargaining skill, a well written contract, and good personal relations. My guess would be that the firms which have had good experiences with the Russians had at least two if not all of these requirements.

VI. "FAILURES" OR VARIOUS REASONS FOR UNSUCCESSFUL EXPLOITATION OF SOVIET TECHNOLOGY

Interest in "failure"stories is useful for appreciating what is involved in selling technology and, more important, having it make money for the purchaser. The use of the word "failure" is misleading, however, because it suggests something is wrong with the technology itself. Sometimes this may be the case, but more often other considerations are at play. The word "failure" also has a certain ring of finality which applies only to one of three categories of "failures" I will discuss. These categories are: (1) abandoned licenses, (2) technology in which firms were genuinely interested but which was not sold, and (3) technology sold, brought to the market, but not as yet a great success.

Abandonment of licenses is usually final and represents a failure of judgment or technology or both.* However, if the technology is not sold by the Russians, that doesn't necessarily mean a permanent failure as it frequently can have a second chance another day. Where technology has been brought to the market without great success, that may or may not be a failure, depending on how long it takes to develop a market and the staying power of the firm.

1. Abandoned Licenses - Various Reasons Why This Can Occur.

(a) *Inadequate Patent Protection.* The Japanese firm Kurita signed an agreement in the 1960s with Licensintorg contingent on having a secure patent position. Secure patent protection is especially important in cases where the technology is easy to reproduce, as with drug licenses or, in the case of Kurita, a new method for constructing cisterns. If complex know-how is involved the patent protection is not always thought important, but when something can easily be reproduced patent coverage is important. Thus, if a patent is not granted, or is invalidated, that can become cause for abrogating an agreement or abandoning the license, as happened with Kurita.

(b) *Technical misevaluation.* A firm can simply overlook something in coming to a technical judgment of the product or process. An interesting case of this occurred when a German firm purchased a license for a machine for cutting continuously extruded metal. This machine, called a MIR, used a controlled explosion principle which brought two cutting surfaces together with great force, separating the extruded metal almost instantaneously. When put into operation under German conditions it was discovered that the cooling plates used by the Soviets through which the molten metal was extruded, were larger than those used in Germany. The recoil effect created by the explosion cutting of the extrusions caused the metal to be dislocated from the smaller and better made German cooling plates. The Russian process apparently worked only because of their larger cooling plates.

(c) *Ulterior motives behind purchases.* When a license is purchased simply for diplomatic reasons or to open a door without much regard to merit, then in all likelihood the license will be abandoned.

(d) *Excessive development costs.* Additional development costs can exceed a firm's willingness or capacity to proceed further with the technology. This can result from a miscalculation as to what was involved in the first instance, financial difficulties of the firm or numerous other reasons.

Financial weakness of the firm played a role in Terraspace, Inc. abandoning the development of the pulsed water cannon, which was dependent on government research funds.

Though Energy Sciences, Inc. has not by any means abandoned its license agreement, its abeyance is a result of the combination of not being able to afford further development in-house and having bought the license with the understanding that such additional costs would not be necessary or at least not excessive. In the 1950s Dresser Industries spent large sums on developing the turbo drill before dropping it.

(e) *New technology makes license obsolete.* The German firm Chemiebau bought a license for a combustion furnace for the production of sulphur. Soon thereafter new technology was developed for producing sulphur as a by-product from oil.

(f) *Abandonment after commercialization.* Firms have brought a new product manufactured under Soviet license to the market to find that they misjudged the market, or encountered unanticipated obstacles.

There are no doubt other reasons why licenses are abandoned, but the above covers most of what I have understood to be reasons why Soviet licenses have been abandoned. All of these problems appear to be universal. Without a comparative approach to this aspect of the report, it is difficult to say whether there is any one reason for abandonment that is more closely associated with Soviet licenses than those purchased from other countries. Intuitively one might suspect excessive development costs, but whether that reflects more on the purchaser or seller is debatable. Furthermore, whether the overall abandonment rate is high, low or average would also require a comparative study.

*Even here a new generation of the same technology may come along and because of improvement in the technology or changed economic environment become a success.

2. Reasons why Technology in which firms had an interest was not sold.

(a) *Regulatory difficulties.* A British firm, GKN, was interested in plastic cabs for trucks developed in the USSR, because they would reduce weight. The cab didn't pass British safety standards.

Several U.S. companies were reported very interested in a Soviet process for making an oxidation inhibitor, BHT, or butylated hydroxy tuolene. BHT is used in materials containing oils or fats to prevent them from going bad, for example, in foods like cookies and cereals. It is also used in such things as plastic liners which are in contact with food and in rubber and industrial oils. The Soviet process used a phenol rather than a paracresol base and appeared to offer significant economies in the manufacture of BHT. The FDA however, was growing concerned about the possible harmful effects of BHT on human tissue, especially the liver. Knowledge of FDA concern dampened interest in the technology.

(b) *Nature of information.* Interest was shown in a programmable method of cyclic water flooding of oil fields which claims to increase recovery rates over that achieved by normal water flooding of oil fields. However, to adequately answer the questions Americans wanted to ask would have required revealing too much of the proprietary knowledge. Unlike other technologies, a site visit wouldn't demonstrate that it worked, as the heart of the technology was in mathematical models and the programming techniques.

(c) *Technical evaluation negative.* The Soviets have developed a method for treating glaucoma using a laser. While treatment is fast and simple, the evaluating firm thought that surgical relief provided more permanent results.

(d) *Negative economic evaluation.* In the past this has been an argument against the use of dry coke quenching in the U.S. It is recognized as having certain advantages over wet quenching, but until the cost of energy goes higher or stricter air pollution is enforced, the large capital investment may not be justified economically. On the other hand, economic calculations can change and are changing from what I understand and it may be only a matter of time before dry quenching is introduced in the U.S.. Dry quenching utilizes the incandescent heat of coke which is otherwise wasted, but the equipment is expensive to maintain. Tied in with this is the whole matter of timing when selling technology. Firms don't just scrap their undepreciated equipment because something a bit better comes along.

The K355 flash butt welding head developed by the Paton Institute is also an expensive piece of machinery. To economically justify its use large blocks of track occupancy time are required. In countries where track maintenance procedures don't permit this, the K355 is less attractive. This is reported a problem in England.

(e) *Refusal to send sample or allow site visit.* There are numerous examples where interest in a technology was frustrated because of inability to receive a sample or visit an installation. It is my impression that the Soviets are concerned about having their technology stolen by revealing too much or sending something which could be copied. This is compounded by a general lack of salesmanship and predisposition to reveal too little rather than too much. The extent to which their fears are valid is hard to judge, but copying others' technology is not unique to the USSR.

Making generalizations can be difficult because some firms have apparently had no problem seeing technology in operation, while others have seen installations only after prolonged insistence and making it clear they wouldn't buy unless they could see it. Still others don't ever see the technology in operation. A Swedish firm interested in the microscalper for cleaning mill scale was only allowed to send chunks of metal to the Russians to be cleaned and returned for examination. On the other hand, a German firm eventually was allowed to see the same machine in operation.

(f) *Slow or no response to requests for additional information.* When the Soviets do send samples it can take 8 months, as was the case with a sample of heat resistant polyvinyl chloride requested by MGA Associates of Chicago. Dr. Dvorkovitz and Associates report numerous cases where companies were very eager to buy Soviet technology, but letters for additional information were never answered. When information comes, but too slowly, or piecemeal, companies lose interest. In situations where a company is planning a new plant and would like to incorporate Soviet technology, certain decisions have to be made according to schedule. Frequently, it seems the Russians can't respond quickly enough to stay in the competition.

(g) *Technology doesn't fit into a company's product plan.* Related in part to timing, Licensintorg representatives have found that large U.S. corporations operate in a similar fashion to the Soviet system. They have plans, annual plans, 5-year plans, 15-year plans, et cetera. No matter how attractive technically, if what the Soviets offer doesn't fit into corporate product plans or area of market expertise, they have difficulty selling.

(h) *Negotiating style.* I have been told by numerous people who work closely with the Russians that their demands for very high down payments can quickly turn off customer interest. One British observer believes their style is particularly counterproductive with smaller, inexperienced companies. He has described their style as follows: They ask for an outrageously high down payment, say what they have is unique in the world and that next year it will cost 50 percent more.

With the exceptions of negotiating style (h), slow response time (f) and inspection of technology (e), the other reasons for losing potential customers do not seem particularly "Soviet". Slow or no response (f) and difficulty in seeing their technology in operation (e) reflect many things, but the root problem in my view, is lack of a "selling" mentality. The institutional survival of Soviet organizations doesn't depend on their finding and keeping customers.

This lack of salesmanship, which derives from the nature of their system, is compounded by the organiza-

tion of their selling effort. When Licensintorg gets requests for additional technical information, they frequently don't have it. Licensintorg, in turn, has to get it from the institutes or enterprises which developed the technology. The people at these institutions do not appear to have strong incentives, aside from the personal prestige of having an invention sold abroad, to jump when Licensintorg asks for more detail.

The main job of the individuals at these organizations is regular plan fulfillment of which selling technology is not a part. Writing up material for Licensintorg's marketing efforts and responding to potential customers' requests for additional information of one kind or another is all extra plan work. As a Licensintorg representative described the situation, selling technology has the status of a "hobby" for most scientists. The responsiveness of the institutes to the informational needs of Licensintorg depends heavily on the interest of the personnel in doing extra work for the sake of promoting their technology abroad. Although there is some financial reward associated with a sale, this is apparently not large enough to affect the basic priorities of the personnel.

This situation changes, however, after an agreement has been signed and initialled by the appropriate ministry. The ministry then has overall responsibility for seeing that the institutes or enterprises under its jurisdiction fulfill the terms of the contract. Assembling technical information or supplying so many man hours of technical assistance then become official obligations of the organizations in question.

Furthermore, the people at Licensintorg are reportedly spread thin. Each person in the Moscow office has responsibility for handling paper flow on about 50 technologies.* Nevertheless, if information is sought for a technology which has a high priority in the sales effort, or more important, has a high priority at the institute where it was developed, information can apparently come quickly.

3. Failure in the Marketplace.

Failure in the marketplace can result from many reasons, some of which can be difficult to anticipate. Nor does current lack of success necessarily mean circumstances can't change in the future to make a product become successful. There follow three case histories which illustrate different types of problems affecting successful commercialization: Andco Corporation's evaporative stave cooling technology, Kaiser Resources Ltd.'s joint venture agreement and Energy Sciences, Inc.'s electron beam gun.

*The extent to which Licensintorg is overmatched by its job can be appreciated by imagining how much technology the U.S. would sell if 200 persons in the Department of Commerce had the sole responsibility for buying and selling all technology for the United States.

CASE HISTORIES

ANDCO CORPORATION - EVAPORATIVE STAVE COOLING OF BLAST FURNACES

Background

The Andco Corporation provides a range of engineering services for the iron making industry, including the construction andoverhaul of blast furnaces. In the early 1970s, Andco learned of the Soviet evaporative stave cooling technique through the trade literature and contact with Japanese users of the technology.

Because of its relatively small size, Andco does not have a large in-house R&D capability. As a result, Andco engineers are alert to licensing opportunities worldwide which will give them access to new developments appropriate to their scope of services. The Soviet process is widely regarded as the most advanced system for cooling blast furnace stacks. Andco became interested since its acquisition would add to the firm's image as a progressive company offering the latest technology.

The Technology

The major advantage of evaporative cooling stems from a doubling of the campaign life of blast furnaces using this technology from an average of 4-½ years with conventional cooling to 9 years or more with stave cooling. Some Soviet blast furnaces have run 12 years without a major relining and a service life of 15 years is anticipated with the latest design of cooling staves.

Unlike conventional cooling, the water reaches the boiling point in a closed loop, gravity driven system. The heart of the technology consists in the manufacturing know-how of large specially designed blocks of cast iron (staves) in which piping is embedded. Water flows through this system as the heavy water from the downcomer pipe(see Figure 1) circulates naturally as a result of water evaporating in the riser pipe. Because water reaches the boiling point with evaporative cooling, approximately 100 times more heat is removed per unit of water than by conventional means. Consequently, only 100 gallons per minute are consumed as opposed to 10,000 gallons per minute. The pump power savings more than offset the added costs of using cleaner water (boiler feed quality) necessary to reduce the buildup of sediment and deposits which impede heat transfer.

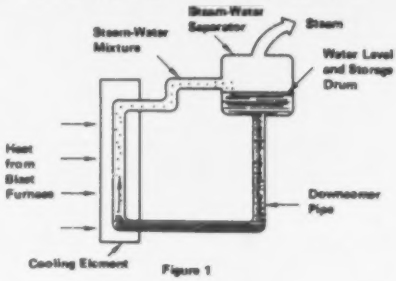


Figure 1

Removing heat by evaporation, or nucleate boiling, also means that the system is self-compensating and requires no operator control of the rate of circulation. An increase in the heat load will automatically result in more rapid boiling and thereby increase the flow of cooling water to balance the hydraulics of the system.

Another feature of evaporative cooling which is reportedly of particular significance to the Japanese is the gas tight welded shell that goes with this system. The Japanese use high top pressure furnaces as do the Russians. While higher top pressures result in higher productivity they also increase the danger of gas leakage from the blast furance. Another safety consideration arises from the system's use of gravity as a power source. This protects it from potential damage caused by electrical failures affecting the water pumps.

This technology has won wide acceptance and is in use in Japan, Australia, Great Britain, Germany, Mexico, Italy and other countries. The Soviets themselves have evporative cooling systems at approximtely 400 installations and use it for cooling heat furnaces and open hearth furances as well. All new blast furnaces being built in the Soviet Union are reportedly equipped with evaporative cooling.

Marketing Evaporative Cooling Technology

Despite the technical advantages claimed for the Soviet system, Andco has not yet met with success in selling it to the U.S. steel industry, although they have sold two units to Stelco in Canada. There are several reasons given for the resistance to the new technology in the United States:

1. Recession in the steel industry. The Soviet system has initial installation costs roughly $3 to $4 million higher than conventional cooling, making it less desirable in capital scarce times despite the long run payback. Furthermore, there has been little new capacity brought on since 1972. Investment in costly new technology is usually introduced as part of capital expansion programs.

2. U.S. blast furnaces are mostly of the low top pressure variety. This means that twelve 5-pound top pressure blast furances may be used where in another country two 30-pound furnaces might be in operation. The percentage productivity losses from having one of two 30-pound furnaces out of operation for 50 to 70 days for relining are considerably different from having one or two of twelve 5-pound furnaces down. Hence, the economics of high top pressure blast furnace operation work more in favor of evaporative cooling than is the case with low pressure furnaces.

3. The system can't be readily used without retraining of operating personnel as new concepts and procedures are involved, especiallyrelating to understanding boiler principles.

4. The system uses elements which fly in the face of conventional wisdom. To preserve the ductility of the pipe inside the staves the piping has a special coating. This may be viewed as a barrier to heat transfer as the object is to transfer as much heat as possible. Secondly, cast iron is supposed to melt at temperatures generated inside a blast furnace (3,000 F.). Soviet studies of heat processes inside blast furnaces show that in a well managed blast furnace, heat is more intense in the center than along the sides.

5. Similarity to past unsuccessful attempts to use cast iron staves for evaporative cooling. Memories among blast furnace operators linger and bring to the Soviet technology negative associations.

6. "Not invented here" syndrome together with anti-Soviet prejudices.

Stelco reports satisfaction with their system which has now been in operation 2-½ years without a single lost hour due to any form of maintenance. Stelco is having a second system installed by Andco at a new site near Lake Erie.

Andco's Experience with the Soviets

This was Andco's first experience in dealing with the Soviets and by their own admission they were not adequately prepared. This led to misunderstanding and some ill will with resultant difficulties in getting all of the information Andco thought it was entitled to under its agreement.

Some of the difficulties arose from taking certain things for granted. Andco assumed, for instance, that after signing the agreement they would be allowed to visit a foundry(in addition to the drawings and technical documentation received) where the cast iron cooling staves were manufactured, as the heart of the technology is in the know-how for the manufacture of the staves. This aspect of the technology was to be sublicensed to Abex Corporation. However, no explicit agreement to this effect was written into the contract and Abex was never allowed to visit a manufacturing facility. There was also a misunderstanding about whether the rights to improvements in the technology covered systems for larger blast furnaces than those provided in the contract. These problems were circumvented by receiving advice from other Western licensees who have formed a mutual assistance society of sorts.

Another area of misunderstanding related to getting services at cost for assistance outside the scope of the contract. In designing systems for larger blast furnaces, Andco wanted some reassurance that they were extrapolating correctly from the smaller furnaces. They found that "at cost" meant whatever the Institute billed Licensintorg for providing the information, not the cost to the Institute.

Aside from misunderstandings of the kind indicated above, the Soviet system is felt to be incapable of responding adequately to a constant trickle of small nuisance questions and problems that arise in the utilization of a new complicated technology. Further-

more, neither the Soviets nor Westerners can just hop on a plane and go to talk to the appropriate person when something serious arises. In recognition of some of these difficulties, the Soviets have been sponsoring bi-annual seminars at which licensees gather to exchange information and discuss problems and improvements with Soviet scientists.

Source
Herb Benz, Project Engineer, Andco Corp.

CASE HISTORIES

KAISER RESOURCES LTD. (KRL) - MITSUI MINING - SOVIET MINISTRY OF COAL (A Joint Venture)

Hydraulic Mining - A Brief Description

Hydraulic mining systems have two components - (1) the use of water to cut coal from the seam face, (2) the use of water as a transportation medium. These two components can be used together or water can be used alone as an economical means of removing coal after it has been mined by mechanical methods. The Soviets mine approximately 10 million tons per year by a combination of these methods. The main users of hydraulic mining in the West are Kaiser Resources, Mitsui Mining and Ruhr Coal of West Germany., This technology is used for mining metallurgical grade coal but might have application in other areas such as mining uranium. The best conditions for hydraulic mining are in steeply pitched, thick seams.

The major economic advantage of hydraulic mining is that under the favorable conditions such as those existing in British Columbia's Balmer seam, recovery of coal reserves can be raised substantially from an average of 20% by room and pillar techniques to 60% or 70% by hydraulic methods. Other advantages lie with the increased safety of the system. Hydraulic mining is dust free and allows the operator to stand well away from the cutting face, protecting him in the event of a collapse. The reduction of dust pollution by a factor of 5 to 10 reduces ventilation requirements and virtually eliminates black lung disease as a health hazard. Furthermore, the water suppression and dilution of methane and coat dust reduces the hazard of explosion from electrical equipment.

Background to Joint Venture

In the early 1960s Mitsui Mining Company sent a delegation to observe Soviet coal mining techniques. One of the systems they saw was hydraulic mining. Based on their observations and technical information received, Mitsui introduced hydraulic mining systems in Japan. Mitsui improved upon the Soviet technology over the years and in the late 1960s licensed Kaiser Resources to use their technology in British Columbia. Since the acquisition of the Japanese license in 1968, Kaiser Resources has itself made some patentable improvements of the technology based on their own operating experience. These improvements relate to such things as the nozzle design which influences cutting effectiveness, a system for crushing the coal before it enters the slurry to improve flow, a water clarification system which is important for reducing wear inside the monitor (gun which shoots the water) and other modifications.

In 1974, Kaiser Industries signed a protocol with the State Committee for Science and Technology. One of the areas designated for exchanging technology was hydraulic mining. A team from Kaiser Steel and Kaiser Resources visited the Soviet Union and were impressed by the amount of hydraulic mining carried on and by the large nmumber of people engaged in various phases of research and development. In Novokuznetsk alone, over 1,000 people are employed in hydraulic mining research. Kaiser people also had a specific interest in powerful pumps the Soviets have developed for transporting slurry against gravity which would enable KRL to apply hydraulic mining under a broader range of conditions.

Following the joint venture tradition successfully applied by his father and grandfather, the President of Kaiser Resources, Ltd., Edgar Kaiser, Jr., suggested the idea of a joint venture. Because of KRL's licensing arrangement with the Japanese, Mitsui was also brought in on the agreement.

Nature of Agreement

The scope of this 20-year agreement signed in 1974 is the whole field of hydraulic mining systems controlled by the Ministry of Coal. This includes technology related to both cutting and transportation. The agreement envisions two forms of joint activity: (1) the exchange of information for the benefit of the individual partners with each to have access to the operations and research activities of the other, (2) a pooling of resources for joint licensing of hydraulic mining technology worldwide.

In recognition of the preponderance of resources and experience which the Soviet partner brought to the joint venture, Mitsui and KRL agreed to make a compensation payment. This was negotiated through Licensintorg but the payment does not represent a license agreement in the usual sense since nothing was licensed from the Soviets except the right of access to their facilities and research output in the field of hydraulic mining. After the Soviets are fully paid, future licensing income will be divided equally among the partners regardless of who actually made the sale or in what part of the world the sale was made.

Kaiser Resources has exclusive marketing rights for North America. The licensor in the rest of the world would be chosen according to who would be best able to meet the needs of the client based on such things as language, geographical proximity, experience with the conditions confronted by the licensee, etc. Patents will be taken out in the name of the inventor, but income from licensing patentable know-how will be divided on a one-third basis.

Experience with the Soviets to Date

From KRL's standpoint, motivation for entering into the joint venture was to acquire a hugh base of R&D support for further improving its own technology and to use this R&D resource together with the broad operating experience of the Soviets to develop an aggressive worldwide marketing effort for hydraulic mining technology, the potential for which KRL believes is considerable.

One can only speculate as to Soviet motives, but KRL believes that a number of considerations were involved: the international prestige associated with selling licenses, interest in Kaiser's own improvements and a certain sense that working with Kaiser would make it possible for Soviet researchers to get their own ideas put to use more quickly.

Implementation of the intent of the joint venture, as understood by KRL, has met with difficulties. The Soviets don't seem to fully appreciate the payment made by Kaiser Resources and Mitsui. The people at the Institute are still expecting KRL to match them in terms of information exchanged, which is precisely what Kaiser Resources can't do since they have no R&D, although they do have strong practical engineering capability.

Another difficulty has had to do with identifying Soviet technology that should be protected by patents. To find this out it is necessary to be given free rein to look around at what is on the shelves and to have a deeper familiarity with what the Soviets are doing that is marketable. In order to effectively market Soviet technology as part of a tripartite package, Kaiser feels they need to have more than a superficial understanding of Soviet work. The Soviets take the position that Kaiser should find the customers first and then they'll come forward with additional information. Despite these problems, Kaiser Resources has been actively promoting hydraulic technology in Australia, New Zealand, the United Kingdom and Germany, as well as North America. Since their joint venture agreement, KRL has sold a license to Coleman Colliery in Alberta. The technology involved in this instance was straightforward and has not required turning to the Soviets for assistance, although the Soviet partnership may have helped them beat out Polish competition.

Despite these difficulties, KRL believes their people have made considerable progress in building closer personal relations with the Russians and in creating an atmosphere of mutual trust and confidence. As these qualities develop, KRL is hopeful the Soviet responsiveness will move closer to the spirit of the venture as KRL envisioned it.

Source

Bob Gronotte, Vice President for Engineering, Kaiser Resources Ltd.

ENERGY SCIENCES INC. - ELECTRON BEAM GUN

Background

Energy Sciences Inc. is a manufacturing firm which has grown from an R&D base specializing in the field of electron beam systems for industril processing. In the past, the application of radiation processing for industrial uses has been limited in success. This has been due in large part to an early emphasis on nuclear reactor produced radiation sources such as Cobalt 60. These bulky gamma ray sources have not been able to provide the low capital cost and ease of adaptation and control necessary for large scale on-line industrial application.

Since the uses of radiation are very attractive, particularly for high speed curing and sterilization, an evolution has been taking place in the high voltage electrical machinery used for the generation and control of electron beams. Advances in this field have been directed at reducing the size and increasing the power of electron beam accelerators. Work at the Institute of Nuclear Physics of the Siberian Branch of the U.S.S.R. Academy of Sciences has contributed to these developments. At international meetings in 1970 representatives of ESI learned of Soviet advances in developing a family of compact transformer accelerators of unusual performance. Though ESI was also doing similar work, Soviet claims suggested the availability of equipment already developed to industrial standards which would fit well into ESI's product line and field of expertise.

The Technology

The main advantage in the use of electron beam processing comes from the efficient coupling of the energy source (in this case the kinetic energy of motion of accelerated electrons) with the product. For example, in curing a thin coating on a substrate, the beam can be so directed and controlled that little energy is lost in the surrounding medium and the power output is delivered to the curable material only. When compared with relatively wasteful and slow conventional techniques such as gas fired or electrical ovens, infra red heaters or even microwave ovens, a great advantage in energy utilization is offered – typically up to a factor of several hundred over thermal ovens. Curing is instantaneous, takes place at room temperatures and can be accomplished within a relatively small process volume.

In the coating, curing application high speed electrons provide the energy for cross-linking or polymerization. Industrial curing is basically a process of drying a material – converting it from a liquid to a solid. Flocked wallpaper, for example, can be made using this method. Small particles of fiber are deposited on a liquid adhesive, which when irradiated becomes hard. The molecular bonding which takes place as a result of irradiation makes the given material toughter, increases its melting point and improves other physical characteristics. This may be particularly useful with plastic where shrink fitting requires heat, but where too much is destructive. Because no reaction catalysts are necessary, solvent effluents normally used with thermal curing can be virtually eliminated.The combination of more efficient energy utilization and less chemical pollution and related advantages have provided the incentives behind developing electron beam curing systems.

The Soviet accelerators at Novosibirsk are reported to be spin-offs of Soviet military research to protect electronic components against bomb blast radiation, the effects of which can be simulated by this equipment.

The Institute for Nuclear Physics has two types of processors which have been in use several years for a variety of industrial applications such as the cross- linking of cable insulation, deinfestation of grain and sterilization of surgical goods. While other countries have similar electron beam equipment, the family of accelerators in Novosibirsk are unique in their size and power. This is accomplished by utilizing a novel pulsed voltage mode as opposed to a DC voltage mode which is in use elsewhere. The smallest, the 1MeV Elita-1 accelerator, is only .6 meters in length and .4 meters in width rated at 5 kilowatts of beam power. This unit is considerably less than one-half the size of comparable equipment available elsewhere. Aside from compactness, other advantages may be simplification of radiation shielding and maintenance equipment requirements.

ESI Experience with the Soviets

The license agreement is currently in abeyance until some technical problems are resolved which affect the on-line reliability of the processing units. Due to a combination of overselling on the Soviet side and ESI taking certain things for granted, the firm found itself with a license for units which did not operate with the degree of reliability required for industrial application in the United States.

ESI assumed that if the product is featured in a glossy export brochure with firm specifications it has been used on an industrial basis and would perform as indicated. Furthermore, ESI scientists later saw the accelerators operating in Novosibirsk, engaged in technical discussions and were given what they considered open access to everything relevant. They were also allowed to take pictures. Only at the bargaining table in Moscow when President Weisman and his attorney were negotiating final terms did it become known that the accelerators did not yet fully perform according to specifications.

Mr. Weisman had informed the Russians that he was unwilling to engage in prolonged negotiations and that his round-trip ticket provided them with three days to finalize the agreement. The Russians understood his position and informed him that on the first day they would discuss technical matters, on the second, terms, and on the third day they would sign the agreement. In discussions of the technical performance requirements it became clear that the units could not be guaranteed to perform as stated in the advertised specifications. Without ESI technical specialists on hand, the decision was made to go ahead with the negotiations. The license was purchased at a discount in the expectation that the problems could be worked out since the machine had been seen in operation.

The technical difficulties have been identified by both ESI and Soviet scientists but ESI is unwilling to spend any of its own resources to correct the problem. ESI has not made any of its annual minimum payments and will not until the Soviets correct the deficiencies. Amicable relations between ESI and the Institute for Nuclear Physics have been maintained, however. Efforts are being made by the Soviets to make good their commitment, but progress is slow.

The fact that this equipment is used for industrial application in the USSR but is unacceptable for use in the United States is thought to reflect different reliability requirements and particular institutional arrangements. In Novosibirsk and in Moscow the plants which use the equipment are closely linked to the inventors so if problems arise expert assistance is available. In other areas where these accelerators are used, such as Kiev or Rostov, it appears as though the users just find a way to make them work. Unlike the United States, in the Soviet Union goods that don't work quite properly (at least in the civilian sector) aren't shipped back — one has to make do.

Sources

J. Weisman, Chairman of the Board, Energy Sciences Inc.; S. Nablo, Chief Scientist, ESI.

PART III. PERSPECTIVE AND ANALYSIS

I. PERSPECTIVE

Significance of Soviet Technology Transfer to Date.

To determine the significance of technology transferred from the USSR, or from any other country to the U.S., the question must be asked - significance to whom? To the purchaser, the end user or the country as a whole? Further, how does one determine significance? This breaks down to a micro and macro view.

Macro-Perspective

It would be possible to develop a sophisticated and time consuming approach to determining the value of Soviet technology to the U.S. economy. This could entail estimates of productivity increases to the various end users, employment created, value of new sales, estimates of total R&D dollars saved, contribution to exports and other indices which one might devise. Then subtract from this money that went down the drain. This could be a complex undertaking, particularly in those cases where the U.S. company had to add considerable amounts of its own time and money to make the technology commercially reliable. Such an exercise, while interesting, would merely demonstrate what is intuitively recognized - the contribution is very small.

Another, simpler approach for getting a sense of the magnitudes involved would be to estimate how much U.S. firms have paid the Soviets for their technology. This I have done very crudely since most firms will not divulge what they paid for technology. I know, however, that at least two firms paid front end fees in excess of 2 million dollars and that others have paid as little as 40-50 thousand dollars. Only two companies to my knowledge have paid any sizeable royalties based on successful commercialization. One of these has paid in the neighborhood of 1/2 million dollars in royalties.

Assuming a generous average of one-half a million dollars front end payment on 26 licenses sold to the U.S., plus another $600,000-$700,000 in royalties, I can roughly estimate $13-$14 million paid to the Soviets for licenses since 1964, though the bulk of that figure would be since 1970. In 1975 alone, the U.S. paid $434 million in license fees and royalties to foreign companies, of which $193 million went to unaffiliated companies.*

Certainly compared to the total amount of $434 million paid in one year by U.S. companies, an outflow of $13-$14 million over a 13-year period is an inconsequential sum. My guess would be that $10-$12 million of that amount has been paid in the last four years. However, to put the insignificance of American purchases of Soviet technology in greater perspective one would also have to estimate what Soviet payments for American licenses have been relative to total Soviet license purchases in a given year or over a period of years. This information I do not have.

It would also be interesting to compare total Soviet payments (royalties and fees) with total U.S. payments in recent years - say since 1972. Which country, in fact, buys more foreign technology *in toto*? Relative to GNP? In the form of licenses? In the form of embodied technology? Since total U.S. imports in 1974 were approximately 8% of GNP and Soviet total imports (including Comecon) run around 3.5% of GNP,* some interesting data might ensue that would put the question of "significance" in true macro-perspective.

Further, what in fact constitutes a significant flow of technology for either country? Compared to a U.S. GNP of over $1 trillion, payments of $193 million to unaffiliated companies in 1975 looks rather insignificant.** If one started asserting technology purchases equal to arbitrary percentages of GNP - 5%, 10%, 15% - as constituting a "significant flow", it is clear that neither the U.S. nor the USSR receives a very "significant flow" of commercial technology from abroad and especially not from each other.

Micro-Perspective

The significance of Soviet technology to the firms which purchase it can have various dimensions, each of which can pose problems for analysis. The *economic significance* of a license to a firm could be said to represent the savings realized by not having to repeat work already done somewhere else. The *technical significance* relates to why a process or product is better than available alternatives or to its uniqueness as a technical accomplishment. The *commercial significance* is, in the final analysis, the true test of significance. How much

*Source. Survey of Current Business, BEA, Dept. of Commerce Vol. #6 June 1976.

*Figures from paper written by A. Elias, staff economist of the Bureau of East-West Trade, U.S. Department of Commerce. In one analysis, found in an article, "The Import of Western Technology" Phil Hanson estimates from 1973 U.S. trade statistics that the U.S. imported machinery and transport equipment equal to around 11 percent of new equipment investment. He also estimates that the share of total western machinery purchases in Soviet investment have not been higher than 4 percent in recent years. (Found in *The Soviet Union Since the Fall of Khrushchev*, A. Brown & M. Kaser eds; MacMillan, 1975, p. 28)

**The figure of $193 million may be more meaningful than the total of $493 million. According to Nancy Nimitz of The Rand Corporation students of licensing statistics are skeptical of payments to affiliated companies as they may represent many things other than payments for technology.

money does the technology make for the firm? Below is an outline of these dimensions together with a discussion of difficulties faced in meshing the levels of analysis.

A. **Significance At The Firm Level - 3 Dimensions**

	Quantitative Measure
1. **Economic Significance** (R&D Expenses Avoided)-(Cost of License) = Net Savings	R&D $ saved
2. **Technical Significance** • Why better than other alternative processes or products (i.e., advantages) • What element of technology permits superior performance • How unique	Specifications
3. **Commercial Significance** (a) Lower production costs • Cheaper material inputs • Higher productivity	Impact on profit margins
(b) New or more competitive product	Sales of X / Total Sales

Either (a) or (b) can affect competitive position of firm. This can be qualitatively rated negligible, not insignificant, important, crucial or some such thing.

B. **Problems in Analysis of Significance**

1. **Economic Significance**

   (a) **Data.** Firms usually don't want to reveal amount paid and if they do, they don't want it public; can ask how much would cost to develop in-house.

   (b) This approach implies firm would have developed technology itself anyway. This not always case as in following situations:

   • *Didn't know something could be done*
   magnetic coil with 600 kG (Maxwell Labs)
   combination of titanium and cobalt hip prosthesis (U.S. Surgical)
   evaporative stave cooling (tried unsuccessfully in the past)
   airtight coke batteries

   • *New concept or approach* which may not have occurred as with mechanical stapling guns (U.S. Surgical)

   • *Company too small to do own R&D* (Andco Corp, Allied Steel & Tractor, Energy Sciences, Inc.)

   (c) *Savings are only theoretical* - if technology not successful in marketplace, then talking about *losses*. Various reasons why this could occur:

   • Firm has to add more to technology than anticipated in order to commercialize. May drop pursuit of technology.

   • Failure in marketplace as a result of marketing errors or unanticipated market conditions.

   • Appearance of new technology which makes purchase obsolete.

2. **Technical Significance**

   (a) May be other technologies which are superior or as good, which purchaser doesn't know about; however, is businessman's job to know what else available among competitors. Even if technology not the most advanced, if firm sees a potential economy for itself or benefit for its customers, purchase may be worthwhile. In certain instances it may lead to more competition in an industry.

   (b) Even if a technology is regarded as best available from a technical standpoint, it also has to be judged economically beneficial - i.e., it must pay. This considerationseems to be at play in U.S., with regard to evaporative cooling and dry coke quenching. This is why real test of significance is ultimately the marketplace.

3. **Commercial Significance**

   (a) In most cases don't know because still in development - dealing with expectations of firm.

   (b) Or too early to say
   • U.S. Surgical - titanium hip
   • Andco - evaporative cooling
   • Fenn - microscalper

• • • • •

It would be safe to say that for very few firms is the acquisition of a license from the USSR, or, in all likelihood from anywhere else, a life or death matter. One firm, U.S. Surgical, owes its existence to a good concept (surgical staplers) and several years of hard development work to make it commercially acceptable in the U.S. It is now a $19 million company and a subindustry in the medical equipment market. An interesting new concept coupled with good management made it a success.

Allied Steel & Tractor states that the "Hole Hog" has been "important" commercially. The electrolytic cells bought by American Magnesium have not been insignificant for that firm's rejuvenation after having its Snyder plant closed down for pollution problems by the State of Texas. Even a large firm, Gutehoffnungshutte in West Germany, considers the evaporative stave cooling

license to be commercially important. They have received ten orders for installing evaporative stave cooled furnaces, making them the Soviet "second favorite child" after the Japanese. A new blast furnace can cost around $200 million. Hoesch A.G. of West Germany and H.W. Sullivan Ltd of England have reported commercial success with their licenses.

Nevertheless, by most measurements of technology "flow", Soviet technology flow to the West has so far been a trickle. However, for some individual firms the licenses have been commercially significant. Regarding the 26 U.S. licenses known to me, three have been abandoned,* fourteen are in development, seven are commercialized, one is in abeyance and one undisclosed. Of the seven commercialized, three have been successes and the others may yet be. Over half (14) of the 26 are in the process of being marketed, adapted for U.S. conditions or further developed. All of these I have generally referred to as "in development". Whether any of the fourteen licenses become commercial successes for the purchasers is a question only time can answer.

*Although one, Dresser Industries, is reported once again interested in the turbo drill.

EXHIBIT 1.

Summary Information About Soviet License Sales to the United States, 1954-1976

Total	Abandoned	In Development*	In Production	In Abeyance	Undisclosed
26	3	14	7	1	1

Total	Agreements signed through 1972	Agreements after 1972
26	11	15

Total	Agreements made with Firms With Sales < $10 mil.**	Firms With Sales > 10 mil.
26	6	20

*The term "In Development" is used to cover two situations: (1) actual further development of a concept which needs additional work, or (2) adaptation to U.S. market or production conditions. A special case is drug licenses of which there are five. Here 4-7 years of additional testing may be necessary before registration with the FDA is possible.

**Based on sales of firms at time of purchase. U.S. Surgical is now $19 million sales, but had no sales in 1964.

EXHIBIT 2.

Overview of U.S. and Canadian Firms Which Have Purchased Licenses from the Soviet Union 1954-1976

Name of Firm	Industrial Sector	Date of Agreement	Production Status	Description of Technology	Sales* To USSR (75)	Sales Of Firm (75)	Other Licenses
Dresser Industries	Equipment for oil & gas industries	1954	Abandoned	Turbo Drill	–	–	–
U.S. Surgical Corp.	Medical equipment	1964	In Production	Surgical stapling instruments	No	15 mil	Has one other
Hoppinstall	Casting and forging	1966	Abandoned	Fluid self-hardening molding mixtures	–	–	–
Joy Manufacturing	Mining & Construction equipment	1969	Marketing	Hydraulically operated rock breaking machine	Yes	650 mil	Buys occasionally
Terra Space Corp.	R&D for high pressure water jet equipment	1970	Abandoned	High powered nozzle for producing pulsed jets of water for use in tunneling.	No	Less than 1 mil	None

*Column "Sales to USSR" indicates whether the firm which bought a license currently sells to the Soviet Union.

EXHIBIT 2. (Continued)

Name of Firm	Industrial Sector	Date of Agreement	Production Status	Description of Technology	Sales To USSR (75)	Sales Of Firm (75)	Other Licenses
Allied Steel & Tractor (Subsidiary of Chicago Pneumatic)	Mining & construction equipment	1971	In production	Pneumatic drill for digging horizontal holes in ground	No	15 mil	Yes
U.S. Surgical Corp.	Medical equipment	1971	In production	Total hip prosthesis made from titanium	No	15 mil	One other Russian license
American Magnesium (Subsidiary of National Steel)	Producer of primary magnesium	1971	In production	Electrolyzers for separation of magnesium from magnesium chloride	No	Less than 25 mil	No other important Licenses
Andco Corp.	Industrial engineering	1972	In production	Evaporative cooling of blast furnace linings	No	80 mil	Yes
Fenn Manufacturing (Division of Amtel)	Manufactures industrial machinery	1972	In limited production	Microscalper for cleaning mill scale	Yes	Undisclosed	Yes
Energy Sciences, Inc.	Electron Beam processing equipment	1973	In development	Particle accelerator using a pulsed beam of electrons	No	1 mil	None
Cabot Corp. (Stellite Division)	Specialty steels	1973	In development	Production of hollow ingots by electroslag remelting	Negligible	400 mil	Yes
Ethyl Corp.	Petrochemicals	1973	In development	Metallurgical technology	Small	1 bil	Yes
Chemetron Corp. (metals Division)	Welding equipment manufacturer	1973 (?)	In development	Flux cored electrodes for welding	Small	460 mil	Occasionally
Alumet Corp.*	Aluminum production from alunite (a non-bauxitic ore)	1974	In development	Process technology related to the preparation of Alunite ore prior to smelting	0	0	0
Dupont (Biochemical Division)	Chemicals	1974	In development	Drug ethnozin for cardiac arrest	Yes	9 bil	Yes
American Home Products	Pharmaceuticals & consumer home products	1974 (Signed an option which was later exercised)	In development	Pyrroxan, a drug for central nervous system disorders	Yes	2.5 bil	Yes
Maxwell Labs	High energy power systems & electrical components	1974	In Marketing	Magnetic impact welding used for sealing ends of nuclear fuel rods	No	10 mil	Yes
American Home Products	Pharmaceutical & household goods	1975	In development	Carboxide insect repellant	Yes	2.5 bil	Yes
Kaiser Aluminum	Aluminum products	1975	In development	Casting of aluminum ingots by electromagnetism	Yes	1 bil	Yes

*Alumet Corp. is a joint venture between National Steel Corp, Southwire Corp. and Earth Sciences formed to commercially develope alunite deposits in Western U.S.

Name of Firm	Industrial Sector	Date of Agreement	Production Status	Description of Technology	Sales To USSR (75)	Sales Of Firm (75)	Other Licenses
Reynolds Aluminum	Aluminum production	—	In development	Electromagnetic casting of aluminum	—	—	—
Texas Utility Services, Inc. (one of 6 companies controlled by Texas Utility Co.)	Provides construction & engineering services to power companies of the Texas Utility Co.	1975	In pilot production	*In situ* coal gasification	No		No
Bristol Myers	Pharmaceuticals	1976	In development	Ftorafur anticancer drug	Yes	1.5 bil	Yes
		1976	In development	Prospidine anticancer drug			
		1976	In development	Option for Carminomycin, an anticancer drug			
Patent Management (Satra)	(1) HPTR tube mill for producing thin wall tubing from hard-to-work metals such as titanium, zircalloy, stainless steel						
CANADA							
Alcan	Aluminum Production	1972	In production	Bus bar system	Yes	2.5 bil	Yes
Kaiser Re-Sources Ltd.	Coal mining	1974	Not applicable	License was form of compensation payment for entering into a joint venture with the Soviets which recognized their greater potential contribution to the venture.	No	260 mil	Yes

Other Aspects to the Question of Significance to Consider for the Future.

(a) *Significance to the USSR* - Since Soviet technology frequently involves a good concept which may function in its Soviet embodiment under their conditions, but not in the Western marketplace, a reverse ripple effect can be seen. In order to sell a technology to the West the Soviets may have to improve its reliability, tolerances or whatever technical parameters are in need of improvement. This was clearly seen in the electron beam gun bought by Energy Sciences, Inc. and Gottfried R. Holding A.G. in West Germany. A similar situation is reported in the case of Soviet technology for hot gear rolling sold to the Japanese. While the toleances were close enough to work on Soviet Zhil trucks, they weren't good enough for Japanese passenger cars. Thus, by selling their technology the Soviets may have to make improvements they would not otherwise have made or made as soon.

(b) *Diffusion in the U.S. vs. USSR.* If all the systemic conventional wisdom is correct, the U.S. should commercialize and hence diffuse the benefits of Soviet technology more quickly than they do our technology. On the other hand, the U.S. abandonment rate of Soviet technology may be higher than Soviet abandonment of Western technology. One might assume the Soviets wouldn't spend hard currency for a Western license unless it was going to be used. In any event, there is no market risk associated with the purchase, though there sometimes may be long delays before the licensed technology is commercialized.

Furthermore, by selling prototype technology, the Soviets appear in some cases to be selling new state of the art technology from which they themselves have not reaped any commercial benefit, and maybe never will because of structural and other problems in their innovation process. In these instances the West may benefit more from Soviet R&D than the Soviets. For example, the impression has been given that surgical staplers are now more widely used in the U.S. than in the Soviet Union. This may become the case with such new technologies as Fenn's microscalper and Maxwell Laboratories impact bonding, both of which are reported in early stages of development in the USSR.

(c) *Poor Exploitation of Improvements Made by U.S. Licensees.* Martin Fleit, a patent attorney who has worked with the Soviets for over 10 years, believes they do a poor job of staying in close contact with their licensees to exploit the usual "flow back" provisions of license agreements. These flow back provisions require passing improvements of the technology back to the licensor or, if a patentable improvement, to give the licensor first opportunity to acquire it.

Technical Significance

It would be difficult for me to categorize the nature and importance of the achievement represented by all the various technologies sold. However, based on what individuals have said certain items seem to represent particularly noteworthy technical successes either by virtue of individual brilliance or planned pursuit of a goal over many years, or both.

- *Evaporative stave cooling.* Many years of serious research and close working relationships between blast furnace operators and institute seem to be the basis for this achievement. Evaporative cooling is a known concept successfully used in other applications. This is the first successful application of the principle to cool blast furnaces. The key problem the Soviets solved was the manufacture of workable cast iron staves. One reason for resistance to this technology in the U.S. is that past attempts to develop evaporative cooling of blast furnaces failed. (H. Benz, Andco).
- *Magnetic coil for impact bonding.* Engineers at Maxwell Laboratories didn't think it was possible to construct coils with field intensities much above 300,000 gauss. Soviet work at the Kurchatev Institute of Atomic Power demonstrated that this figure could be doubled. This is considered to be a unique achievement and opens up a whole new range of possibilities in the field of magnetic shaping and forming. (A. Kolb, Maxwell Labs.)
- *Kivcet process for smelting lean copper based ores.* This technology is regarded at Koeckner-Humbolt-Deutz as a significant advance in the state of the art which involves equipment economies, reduced air pollution and energy saving benefits. Over 20 years of research are represented by this achievement.
- *Electromagnetic casting.* Though Westinghouse patented this process many years ago, the Soviets were the first to practically apply the principle of magnetic levitation to casting metal. The successful commercialization of this concept is considered a genuine breakthrough. (T. Pritchett, Kaiser Aluminum and Chemicals).
- *K355 flash butt welding machine* Swiss and German firms reportedly worked for years in trying to develop a compact mobile flash butt machine for welding rail on site as the potential benefits were clearly recognized. The Paton Institute's K355 unit represents the only successfully commercialized mobile flash butt welder known. (K. Eichinger, Plasser & Theuer.)
- *Differential scanning microcalorimeters.* Though an instrument limited to specialized scientific research, the sensitivity of this equipment permits more accurate data measurement than is possible with other equipment available in the U.S. or Western Europe. It is the product of the individual brilliance of Professor Privolov the designer of the machine, built at his Institute of Protein Chemistry near Pysheno. (J. Sturdevant. Yale University).
- *Graphite furnace accessory* for atomic absorption spectrometers. This furnace developed at the Leningrad Polytechnic Institute is the first one which works effectively. By vaporizing sample material, data analysis is made possible where previously this was not the case. This represents a significant design achievement by Professor L'ove of the Department of Analytical Chemistry. (R. Scott, Perkin Elmer).

These examples should not be regarded as the only technologies developed by the Soviets worth singling out, but merely some of the items which my discussions clearly suggest represent significant technical achievements. They all represent "firsts" in terms of practical application and in many instances success where others have failed or failed to try hard long enough. In some instances there may be alternatives for achieving a similar result. For example, there are other ways to form hard-to-work metals than by using a magnetic coil, but they may not be as economical. In other instances these technologies uniquely extend performance capabilities such as the graphite furnace of L'ove. Technologies such as the microscalper for cleaning mill scale, stapling guns, and the pulsed water jet nozzle, represent new ideas which required additional work to realize the conceptual advantages over other technologies.

• • • • •

The technological achievements represented by the information in this report may raise an issue in the minds of some readers which I believe needs addressing. The question may arise as to how much of this technology is really Soviet, how much is built on Western work or copied from Western work? The simple answer is that I don't know since I haven't approached the subject from that standpoint. I am told, however, that around 1900 the Hungarians first developed the stapling gun concept which the Russians have refined over the years. The Americans have now improved on the Soviet version.

Soviet achievement with magnetic fields in aluminum smelting was built on earlier French work. Soviet electrolytic cells for magnesium chloride separation is reported to be an improvement on Canadian cell technology, which, in turn, is based on German technology. The Soviet pneumatic underground drill may have been an improvement on a Polish version. Polish work in hydraulic transport is reported to have influenced Soviet developments in this field. The list could no doubt be much longer.

My feeling about this issue is that it is irrelevant. If "who thought of it first" is really that important then one might as well acknowledge that there are few areas of modern thought that weren't adumbrated by the Greeks or Chinese. Even the greatest seminal thinkers don't come up with their ideas in a vacuum. Einstein's Theory of Relativity was foreshadowed by the work of Poincaré, Lorentz and others. Further, even the fact

that somebody else did the same thing doesn't necessarily mean that the Soviets based their work on it or were even aware of it. The history of science and technology is rife with examples of people who have made similar inventions or discoveries quite independently of each other.

But even assuming that *all* the Soviet technology sold to the West was a modification or improvement of someone else's technology, improvements on technology, while less dramatic than big breakthroughs, are also important and contribute to progress. Without the electric starter, improved engine performance, better brakes, and improved steering, the original automobile would never have had much to offer over the horse.

Furthermore, even if Soviet innovations or improvements are considered minor, experienced observers believe that the cumulative effect of small unnoticed modifications and improvements are as important as changes that are normally regarded as major innovations. The introduction in 1925 of mechanical methods for manufacturing electric light bulbs was a major innovation. But in the following six years, an accumulation of small improvements were of a magnitude equivalent to a five-fold increase in labor productivity. In his study of the petroleum refining industry, John Enos concluded that there were greater reductions in factory inputs, per unit of output, when a process is improved than when it is supplanted by a better one. This was based on estimating productivity gains of four major process innovations over the processes they replaced and then measuring further productivity gains from improvements subsequently made on the innovations.*

Finally, if one wanted to dwell on the foreign origins of Soviet technology, one would have to point out that much U.S. technology represents improvements on foreign technology or is based on foreign concepts. Indeed the whole notion of "indigenous" technology is thought by many with whom I have spoken as meaningless in an age in which science is truly international. Furthermore, are foreign scientists who live and work in the U.S. to be considered part of U.S. indigenous technology? Should not the contributions of Universal Oil Products in the field of chemical catalysis take note of the fact that much of that firm's success can be traced directly to V. Ipatieff, a 63-year old Russian immigrant and internationally recognized genius in the catalysis of chemical reactions; or that its current Vice President for Science and Technology, V. Haensel, inventor of platformate, was born in Russia? At Westinghouse two out of three researchers I talked with were British. The Director of Research at Airco Temescal is also British. Are their contributions to American technology part of an "indigenous" effort?

The batonnette system of computer coding of groceries, the jet engine, Vallium and Librium, steel belted radial tires, the Basic Oxygen Process for steel making, are just a few everyday U.S. technologies which came directly from abroad. A little investigation could easily produce a long list of similar examples.

II. ANALYSIS OF THE POTENTIAL FOR TECHNOLOGY TRANSFER FROM THE USSR TO THE U.S.

The potential for the United States benefiting from Soviet technology depends on: (1) how broad or restrictive a definition of technology one uses, (2) the quantity and quality of technology in the Soviet Union, and (3) getting at it.

This report is primarily about Soviet technology for which Western companies are prepared to pay money. However, in assessing the potential for technology transfer it would be unwise to draw too sharp a distinction between commercial technology and R&D. Just as fundamental research provides the base for future applied research, so applied research is the basis for new product and process technology. Ultimately all three elements are an interdependent whole. Furthermore, the main organizations which carry on basic research, the 250 research centers* of the USSR Academy of Sciences, plus the Academy Institutes of 14 Union Republics are often involved in applied research as well as prototype construction and limited manufacture, though it would be large scale in comparison with U.S. universities. Evidence of the participation of Soviet research institutes at all levels in commercially oriented technology development is reflected in the institutional origins of the technology licensed to the West (see Appendix #1). The Soviet government is also continuously experimenting with new organizational arrangements aimed at further strengthening links between research institutes at all levels and industry.**

Consequently I will make some comments and generalizations about the actual and potential benefits of technology transfer at the level of applied research. To illustrate the basic phases of technology development, I have used a schema put forward by H. Donaghue of Control Data Corporation for the computer industry. There is no particular reason to assume that the basic stages described don't more or less apply across the board for manufacturing technology (See Exhibit #3).

In broad systemic terms the Soviets are regarded by many informed observers as having strong capability in the areas of basic research, laboratory development and prototype development. Donaghue refers to the output of these three stages as "product development technology". The stages of process development, pilot production and quality analysis he refers to collectively as "manufacturing process technology". These stages

*J. Berliner, *The Innovation Decision in Soviet Industry*, p. 54-55.

*The USSR Academy of Sciences has four departments: (1) physics, engineering & mathematics, (2) chemical engineering and biological sciences, (3) earth sciences, (4) social sciences.

**S.V. Nemchinov, "Organizational Forms of Transferring Results of Basic Research to Industry", paper given as part of US-USSR Exchange in the area of Science Policy.

Exhibit #3

BASIC PHASES OF TECHNOLOGY CYCLE

1. Basic Research	· Provides knowledge of basic principles and understanding of nature.
2. Laboratory Development	· Takes basic concepts to develop models or working elements to prove feasibility of making a finished product.
3. Prototype Development	· Document characteristics of each component or working element to prove feasibility of all the concepts when combined in a finished product.*
4. Process Development	· Look at all methods involved in making a final product, identify internal equipment needs, quality vendors.
5. Pilot Production	· Produce limited number of product, give to customers to test.
6. Quality Analysis (Engineering Support)	· Find out how well product works in an outside environment.
7. Product Management	· Managerial skills needed to produce a sufficient volume at a predetermined cost.

*Sometimes components which function separately will not function satisfactorily when placed together in a finished product.

are not isolated, of course. There must be close interrelationships between laboratory development (stage 2) and process or production people (stage 4) and between process development (stage 4) and quality analysis (stage 6). It is in "manufacturing process technology" (stages 4-6) where, seen in broad systemic terms, the Soviets are viewed by many Western observers as lagging and probably have comparatively less to offer. This reflects both quality control problems and the frequently cited Soviet difficulty of moving technology from the laboratory to commercial practice. The latter is a problem in all economies but there are numerous reasons to believe it is especially severe in the USSR*, although in various priority situations they may have some advantages over our system in this regard.

Much of what occurs from basic research through to prototype development is information available in books, articles and papers. It would be extremely difficult and very expensive to estimate how much Soviet technology flows to the U.S. through open literature and academic exchanges. Catepillar's inertial welding process, according to I.A. Oehler, former head of the American Welding Society, is a technology developed from Vill's article on friction welding translated in the 1960s. The major stimulus for work in program proving in this country came from Yanov's article on this subject translated by Rutledge of IBM in 1964.** Program proving involves using mathematical means to determine computer software reliability. The first earthquake successfully predicted by U.S. scientists used a Soviet model.*

It would be interesting to know how many other examples exist of technology transfer of this kind. Due to the widespread illiteracy of Russian among U.S. scientists, no doubt the possibilities of technology transfer via literature have not been fully realized. Literally hundreds of Soviet technical publications are available in the U.S. through stores such as Kamkin in Rockville, Maryland, or Four Continents Bookstore in New York City, but the vast majority of these are in Russian. Though the quality of the articles may vary greatly there is no dearth of available information. There are also publishers, such as Pergamon and McGraw-Hill, which have an interest in publishing Soviet technical and scientific material in English.

Dr. Roderick Scott, Chief Scientist at the Perkin Elmer Corporation suspects that the various technical societies are an important conduit for Soviet technology. The American Optical Society regularly translates the Soviet *Journal of Spectroscopy* and the Soviet magazine *Optical Technology*, among others. The former he considers first rate and "a good source of ideas". Other societies such as the Institute for Electrical and Electronic Engineers (IEEE) also translate Soviet technical publications. These few examples suggest that any comprehensive investigation of technology transfer from the USSR to the United States would require a systematic survey of the scope and effect of the translation activities carried on by these and other technical societies in the United States.

Finally, from conversations with Licensintorg representatives in New York and with U.S. companies themselves, I received the impression that some of the larger firms such as Union Carbide, General Electric, Gould, Rohm and Haas, and others, follow quite closely relevant Soviet technology. Vadim Volkov and Gala Zharikova of Licensintorg have remarked to me on the number of large firms they visited which had substantial libraries of Soviet technical literature. How much commercially useful information is transmitted to American firms through Soviet publications and patent disclosures cannot be easily known.

A very frequent comment among people I have talked with was that getting into Soviet research institutes could be very valuable. While the quality of work at the thousands of research institutes undoubtedly varies, many are reported well equipped and staffed with highly competent people. The 250 Institutes of the USSR Academy of Science appear to be generally regarded as first rate. Other institutes such as the E. O. Paton Institute for Electric Welding, the All Union Research and Design Institute for Metallurgical Machine Building, the Kurchatev Institute of Atomic Power, the Leningrad Polytechnic Institute, the All Union Research and Design Institute for Aluminum, Magnesium and Electrodes, the Baikov Institute for Ferrous Metallurgy, and others seem to get very high

*For a particularly thorough discussion of the Soviet innovation process see J. Berliner, *The Innovation Decision in Soviet Industry*, MIT Press, Cambridge, Mass. 1975).

**J.D. Rutledge, "On Yanov's Program Schemata", *Association for Computing Machinery Journal*, Vol. 11, No. 1, pp 1-9.

*William Kautz, Computer Specialist Stanford Research Institute.

ratings from Western scientists. Many of these Institutes, especially the newer ones, are reported well equipped in addition to having top flight scientists.

Evidence to support the proposition that the numerous Institutes are potentially valuable sources of information rests on sheer numbers of personnel and on the comments of people active in many different areas of technology. While there is no reason to assume the Soviet scientist is less intelligent on the average than his American counterpart, he may be less productive on the average. However, offsetting this frequently presumed lower level of productivity* (are analysts comparing their productivity with the productivity of our corporate research, government research, or university research?) may be greater continuity of Soviet research funding and less research devoted to developing consumer items such as Bubble Yum** or Banana-marshmallow flavored lip moisturizers, which many in the U.S. might regard as frivolous additions to national welfare.

However, even if 75% of Soviet research had nothing to offer the U.S., which seems unlikely, the 25% which may be concentrated in 300-400 first rate research establishments may still represent a large potential source of new ideas, approaches, data, worthy developments which never got off the shelves, and other forms of information (see DeHaven, "Technology Exchange: Import Possibilities from the USSR", ARPA R-1414, for a more detailed discussion of some of these aspects). This makes it important to identify those institutes and research centers which are viewed as doing work on a par with our best. The problem with this approach, is that excellent researchers can be found in lesser-known institutions. According to figures provided in *Soviet Export*, 1/106/7, their scientific and technical establishment consists of:

5,5000 research and development centers, including 1,100,000 staff
300,000 candidates for doctorates
30,000 Doctors of Science
600 members of the Union Republic & USSR Academies of Science
700 corresponding members***

In addition to the logic of numbers are the comments of individuals which suggest that the technology gap is probably more within the USSR than between it and the West. Stated differently it would be unwise to reach conclusions about Soviet technological capabilities based on the levels observed in plants and factories. Below is a list of comments made by various persons on this subject.

"The Russian problem is not so much lack of know-how, but lack of wherewithal - ability to put all the pieces together, get the right materials, etc."
Mr. R. W. Meyerhoff,
Corporate Research Fellow,
Union Carbide

"What they know how to do and what they actually do are not the same."
Mr. R. Euler, Director of International Programs, U.S. Department of Agriculture

"We should be grateful to the Russians that their system is so poorly organized."
Mr. H. Gatos, Professor of Materials Science, MIT
Mr. J. Reth, Director of Blast Furnace Operations, Gutehoffnungshuette (FRG)

"Soviet Research Institutes are a gold mine."
Mr. P. Detoeuf, General Director of Cifal (France)

"The Russians have many good ideas but they have to be evaluated carefully (comment in the context of electroslag technology)."
Mr. G. Alsen, Production Manager,
Avesta Jernwerks (Sweden)

"The Russians can produce quality and they can mass produce; what they have trouble doing is mass producing quality."
Mr. Lapato, Director of the French Machine Tool Association

"The Russians can excel at something if they choose. Otherwise, the rule of sufficiency seems to operate, that is, to make something as well as needed to serve a given purpose."
Mr. C. L. Newman, Vice President of Con Edison

The above comments were made spontaneously in the course of discussions.* All of these individuals are involved either in commercial dealings with the Soviets or active in the bilateral exchanges.

The question may be raised about the extent to which it is meaningful to distinguish between problems that are rooted in a shortage of technical skills, lack of hardware to carry out scientific and technical tasks, and general organizational disfunction of which severe supply difficulties are an important part. In the final analysis, the technological level of a society depends on more than the existence of raw scientific and technical

*While I don't know that anyone has attempted to measure productivity of Soviet R&D, a recent Harvard study indicates that almost three-fourths of the $20 billion spend annually in the U.S. on R&D is unproductive (ref. *Electronic Design*, 12/6/76).

**Bubble Yum, produced by Life Saver, is an improved bubble gum which "breaks down" more quickly in the chewers mouth.

***These numbers are similar to those reported in DeHaven, pp 9-11.

*To analyze what lies behind these statements is beyond the scope of this project and has been very thoroughly discussed in books such as: *The Soviet Economy*, Alec Nove, and more recently by Joseph Berliner in *The Innovation Decision in the Soviet Economy*, and Richard Judy's "The Case of Computer Technology" found in *The Soviet Economy: A Book of Readings*. Richard Erwin, Inc. 1974.

brain power. It also depends on the effective utilization and organization of those skills to enhance the productivity and welfare of the country.

I believe, however, it is meaningful to try to distinguish the elements which cause a technology gap in any given sector, because of the implications of one's analysis on the degree of technological leverage the U.S. exercises in its relationship with the USSR. If one views the Soviet Union as technologically backward, struggling to catch up with the West, that may lead to policy behavior different than if one views the Soviets as possessing tremendous scientific and technological capabilities which are unevenly or inefficiently translated into everyday practice. For if they possess the scientific and engineering skills to do whatever they want, they will do it with or without U.S. help and may ultimately be in a stronger position by doing it on their own.*

Areas in Which To Expect Technology - A General Comment

Obviously the likelihood of the Soviets having useful technology available in a given area is dependent on their priorities and the continuity of those priorities. It is not surprising therefore that they currently have competitive technology available in metallurgy and in electronics. However, over time that may change. Nor is it surprising that they would have more technology to offer connected with their railroad system than with their highway system, although in connection with highway snow removal techniques the Soviets may have much to offer. Isolating the factors which would assist in identifying priorities is an elaborate exercise way beyond the scope of this report. It would entail examining political, military, economic, geographic, and technical considerations which go into their planning process. Further, there are institutional considerations related to powerful technical vested interests which get built up over the years as well as the clout exercised by individual scientists whose personal interests may influence what is a priority and what is not.

However, an important subcategory of influences which determine priorities is the "necessity is the mother of invention" syndrome. Soviet advances in using non-bauxitic ores for producing aluminum may reflect lack of bauxite in the USSR, together with a desire not to be too dependent on outside sources for a strategic resource. Another explanation, according to Nick Grant, Director of MIT's Center for Materials Science and Engineering, may lie in a combination of transportation problems and distances between suitable bauxite sources, energy and markets. Utilization of peat and shale oil for energy production before the U.S. presumeably reflects energy resource distribution problems not faced here. The development of hydraulic mining long before the U.S. similarly reflects the existence of different types of geological formations in which their coal is found. This stimulated employing methods not needed earlier in the U.S. where abundant flat, thick seams suitable to room and pillar methods existed. These are rapidly being exhausted.

Sometimes technological achievement in one area is thought to reflect efforts to compensate for technical or capacity problems in another. Soviet achievements in computer software are thought to reflect the need to compensate for hardware limitations;* impressive equipment for testing concrete observed by experts in the HUD exchanges with the USSR may indicate quality control problems in the manufacture of cement. In the 1950s, limited vacuum melting technology together with insufficient heavy rolling capacity for making heavy steel plates for ships and armored vehicles are thought to have been important stimuli to the development of electroslag remelting technology. ESR permits casting of wide slab ingots which can be rolled to heavy plate on smaller rolling mills.**

In sum, determining the motivating considerations which cause particular technologies to be emphasized is a complicated undertaking. However, the simplest and most obvious guide to broad areas where the Soviets are likely to have technology are their 5-year plans.

Prospects for Increased Flows of Commercial Technology to the U.S.

A. *Discrepancy between potential and performance.* Despite the internal gap between engineering potential and production reality recognized by many of the persons interviewed, the Soviets patently have developed competitive and frequently very innovative *commercial* technology in a variety of areas. Though the absolute number of license sales since Licensintorg's founding in 1962 is very small (probably between 400 - 500) it is still more than many might have assumed. Nevertheless, there is an obvious discrepancy between the large Soviet scientific and technical establishment and their undistinguished performance in the world market for technology. It has been estimated that in 1969, there were 50,000 license agreements in force worldwide. ***Soviet sales of 400 -500 licenses don't begin to approach what would be expected from a country which claims to have one quarter of the world's scientific manpower.

---

*Sakharov expressed this point through a metaphor on the long run effect of buying technology to save resources in the short run: "the skis and perhaps mental attitudes suitable for following the trail of another trail-breaking skier, may be unsuited to breaking the trail oneself." Quoted in P. Hanson, "The Import of Western Technology", *The Soviet Union Since the Fall of Khrushchev*, Macmillan, 1975, p. 25.

*Hugh Donaghue, Assistant to the Chief Executive, Control Data Corporation; Karl Drexhage, Management Information Systems Consultant, Stanford Research Institute.

**Remarks of W. Manley in "Proceedings of the East-West Technological Trade Symposium", U.S. Department of Commerce, March 1976, p. 74.

***Cited in an as yet unpublished paper by P. Hanson "The Diffusion Imported Technology in the USSR" University of Birmingham.

Explaining this discrepancy is complex, but certain obvious considerations can be isolated.

- Lower levels of R&D productivity
- Structural and incentive related problems which affect innovation and hence levels of commercial technology
- Poor organization and incentives for selling technology
- Propensity of Westerners not to view the USSR as a source of technology.

I think it is reasonable to assume that, depending on the sector or subsector in question, all of these considerations are probably valid. However, the testimony of many people interviewed for preparing this report suggests that greater emphasis in our thinking should be placed on the last two factors than has possibly been the case in the past. Related to the inadequate incentives that seem to inhibit selling technology is the impression received from both Russians and Americans that selling disembodied technology has simply not been a very high priority in the Soviet foreign trade effort.

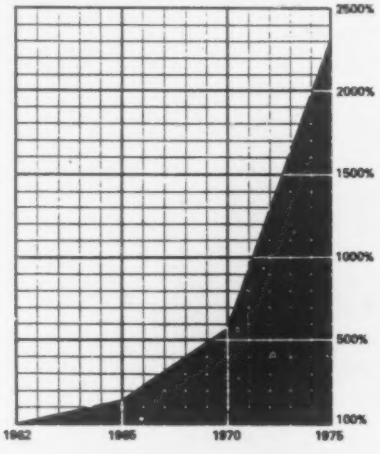
B. *Prospects for the Future.* In many judgment there is no reason not to expect steadily increasing exports of Soviet technology in the form of licenses. The technological base exists and will continue to grow. The sales trend is presented in the graph below. As one might expect starting from a low base, the percentage increase in the value of license sales since 1962 has been large. From 1962-1970 the increase in the value of sales was 500%, from 1970 to 1975 the value of licenses sold has increased over 1500%.

Further, as more Americans come in contact with Soviet technology through commercial activities or government and academic exchanges, greater exposure to what is there will result. However, the main variable affecting future sales of licenses is the ability of Licensintorg to improve the organizational effectiveness of its licensing program. This will require dealing with many of the problems described in Part Two, Section V.

Increasing embodied technology exports to the West will be a more difficult undertaking for the Soviets. They face myriad constraints which include internal demand requirements, the need for more elaborate organizational infrastructure than for licensing, discriminatory tariffs on manufactured goods, and insufficient incentives for the Soviet enterprises which have to manufacture the goods for export.

Because of the revenue implications of selling finished products, it seems likely the Soviets will intensify their efforts to increase exports, which have already seen some success in the Belarus tractors and Lada automobiles.

Value of licenses sold by V/O Licensintorg (1962=100)



Source: *Soviet Technology and Engineering Digest*, Moscow 1976

GENERAL BIBLIOGRAPHY

R. Amann & R. N. Davies, "The Technological Level of Soviet Industry", paper given at Annual Association of Soviet and East European Studies, Cambridge, England, 1975.

R. Amann, J. Slama, "The Organic Chemicals Industry of the USSR: A Case History in the Measurement of Comparative Technological Sophistication by Means of Kilogram/Prices".

R. Amann, M. J. Berry, R. N. Davis, N. Wienert, J. Kozlowski, E. Zaleski, *Science Policy in the USSR*, OECD, Paris.

M. Balz, *Invention & Innovation Under Soviet Law*, D.C. Heath, Lexington, Mass., 1975.

Joseph Berliner, *The Innovation Decision in Soviet Industry*, MIT Press, Cambridge, Mass., 1975.

Bornstein & Fusfeld, *The Soviet Economy: A Book of Readings*, Richard Irwin, Inc., Homewood, Ill., 1974.

David Bronson, "Scientific & Engineering Manpower in the USSR and Employment in R&D", in *Soviet Economic Prospects for the 1970s*, JEC, Wash., 1973.

Al Cookson, "Boosting R&D Output", in *Electronic Design*, Dec. 6, 1976.

Robert Campbell, *The Economics of Soviet Oil & Gas*, Johns Hopkins Press, Baltimore, 1968.

James C. DeHaven, "Technology Exchange: Import Possibilities From the USSR", Rand Publication, R-1414-ARPA, April, 1974.

D. Granick, "Soviet Introduction of New Technology: A Depiction of the Process", SS C-TN 2625-7, SRI/Strategic Studies Center, 1975.

L. Finonova, M. Postolenko, C. Nikitin, *Organizatia i Teknika Vneshneitorgovli*, Myeshdunarodnie Otnoshenia, Moscow, 1974.

Philip Hanson, "The Import of Western Technology", *The Soviet Union Since the Fall of Khrushchev*, A. Brown & M. Kaser eds, Macmillan, London, 1975.

Philip Hanson, "The Diffusion of Imported Technology in the USSR", paper given at NATO Colloquium, Brussels, 1976.

J. Hardt, G. Holliday, "Technology Transfer & Change" in the Soviet Economic System", paper for NATO Colloquium, Brussels, 1976.

J. Hardt, G. Holliday, "U.S.-Soviet Commercial Relations: The Interplay of Economics, Technology Transfer & Diplomacy", CRS June 1973, #5270-01938.

M. Harvey, L. Goure, V. Prokofieff, *Science & Technology as an Instrument of Soviet Policy*, University of Miami, 1972.

G. Kulagin, "Pravila Igre", (Rules of the Game) in *Ekonomika i Organizatsia Promishlenovo Proizvodstva*, #2, 1975. This is followed in EKO #6 by a very candid discussion of Kulagin's article by top managers and Gosplan officials.

Carl McMillan, "Direct Soviet and East European Investment in the Industrialized Western Economies", working paper #7 for the Institute of Soviet & East European Studies, Carleton University, Ottawa.

Proceeding of the East-West Technological Trade Symposium (March 1976), panel on potential for reverse flow of technology. Mark Alexander, Energy Technology; William Manley, Metallurgical Technology; William Norris, Computer Technology.

J. Slama & N. Vogel, "Problems of Measuring Technological Levels for the Soviet Economy", paper given at Conference for Soviet & E.E. studies, Banff, Canada, 1974.

J. Slama & N. Vogel, "Technology Advances in CMEA Countries", Osteuropa Institute, Munich, 1976.

Peter Smolders, *Soviets in Space*, Taplinger Publishing Co., New York, 1974.

N. Smelyakov, "Business Meetings: Comments by the Deputy Minister of Foreign Trade", in JPRS 61148, 5 Feb. 1974.

The Soviet Economy in A New Perspective, a compendium of papers, JEC, Oct. 1976.

W.E.G. Salter, *Production & Technical Change*, Cambridge, 1969.

A. Sutton, *Western Technology of Soviet Economic Development 1917-1965*, 3 vols., Hoover Institute Press, Stanford, 1968.

"Transfer of U.S. Technology to the Soviet Union: Impact on U.S. Commercial Interests", SRI, prepared for U.S. Department of State, 1976.

Readings on Licensing Aspects of Soviet Technology

P. Maggs & I. Jerz, "The Significance of the Soviet Accession to the Paris Convention of Industrial Property", *Journal of the Patent Office*, April 1966, vol. 48.

M. L. Gorodissky, *Licenses in USSR Foreign Trade*, Moscow, 1972, NTIS-COM 73-10738.

M. L. Gorodissky, "Protection of Patent Rights in the USSR", in *Journal of the U.S.-USSR Trade & Economic Council*, April/May 1976.

Licensing Executives Society (LES), *US/USSR: Sale and License Prospects for Technology and Patents*, 1974.

Rechtsinformation, Bundesstelle fuer Aussenhandels - Information, summary of papers given at an East-West Marketing Seminar on license-trade, July 1975, Cologne.

G. Shadrin, "Organizational & Legal Problems Involved in the USSR's License Trade With the Capitalist Countries", *Foreign Trade*, #1, 1976.

SOME SOURCES OF INFORMATION ON SOVIET TECHNOLOGICAL DEVELOPMENTS OF COMMERCIAL INTEREST

1. Periodic bulletins put out by Soviet foreign trade organizations, especially those by:
   (a) Machinoexport
   (b) Techmashexport
   (c) Energomashexport
   (d) Stankoimport
   (e) Techsnabexport
   (f) Licensintorg

2. *Soviet Export*, v/o VNESHTORGREKLAMA, Moscow (bimonthly)

3. *Soviet Technology and Engineering Digest*, v/o VNESHTORGREKLAMA, Moscow, 1976 (first of three publications as part of an agreement with the Chilton Publishing Co. of Radnor, Pa.). Much of this material is taken from *Soviet Export*.

4. *Vectnik Acadvemii Nauk*, USSR, Izdatelstvo Nauka, Moscow.

5. *Referativni Zhurnal*, All Union Institute for Scientific and Technical Information (VINTI), Moscow (contains information about new patents).

6. *Ekonomicheskaya Gazeta*, Yeshinidelnik tsentralnovo comiteta CPSU, Moscow.

7. *Foreign Trade*, published monthly by the Ministry of Foreign Trade. (This publication addresses trade issues in general, but frequently has specific articles on Soviet technology and licensing developments.)

8. *Ecotass*, Indreba, Basle, Switzerland (in cooperation with *Tass*).

9. *Exakt*, Deutsche Verlags-Anstalt, Stuttgart (together with Novosti press). This publication contains information about new developments in Soviet science and industry and new patents offered through Licensintorg.

10. Soviet Halls of Economic Achievement. Found in Moscow and in the capitals of all the Union Republics. According to a British scientist, information displayed is very advanced and considerable backup detail information is available in Russian.

11. *Science in the USSR 1922-1972*, Progress Publishers, Moscow.

Non-Soviet Sources

11. *American Review of East-West Trade*, Symposium Press, Inc., White Plains, New York

12. *East-West Technology Digest*, Welt International Publishing Co., Washington, D.C.

13. *Soviet Business & Trade*, Welt International Publishing Co., Washington, D.C.

14. *Chase Bulletin of East-West Trade*, Chase Publishing, New York.

15. "Technology Imports From The Soviet Union", a paper prepared by the Stanford Research Institute, Long Range Planning Service, 1975.

Some Materials on Specific Areas of Soviet Technology

16. *Survey of Underground Hydraulic Coal Mining*, prepared for U.S. Bureau of Mines (#HO242031) by W. Cooley.

17. *Review of Russian Data on Hydrotransport of Coal*, prepared for U.S. Bureau of Mines (#JO265016) by W. Cooley of Terra Space, Inc.

18. *Survey of Soviet Programming*, prepared for the National Science Foundation (#GJ-41741) by Karl Drexhage of Stanford Research Institute, 1976.

19. *Soviet Steel 1974*, a report prepared for the American Iron and Steel Institute, Washington, D.C., 1974.

20. "High Voltage Electric Transmission Technology", a paper prepared by W. B. Allinson of the Center for Russian and East European Studies, University of Birmingham, England.

21. "The Kivcet Cyclone Smelting Process for Impure Copper Concentrates", from *Journal of Metals*, July 1976, McGraw-Hill.

22. "Key Developments in Soviet Metallurgy", in *Metals Progress*, April 1, 1976, by W. Marley & J. Wamsley of the U.S. Army Foreign Science and Technology Center.

23. *Report of the United States Coal Mining Delegation to the USSR*, Sept. 1973, BOM.

Appendix 1

SOME INSTITUTIONAL SOURCES OF SOVIET TECHNOLOGY SOLD OR BEING OFERED TO THE WEST

1. Central Research Institute of Machine Building Technology (TSNIITMASH)
   - Self-setting moulding mixtures (Sodiprom, GKN, Nippon Chuzo)
   - Bimetallic rollers (Aschenbach Buschhutten)
   - TsEP-4 electron beam guns (Carel-Fouche-Languepin)

2. All Union Research & Design Institute for Metallurgical Machine Building (VNIIMETMASH)
   - HPTR Cold Rolling Mills (Carpenter Technology, Universal Oil Products, Kobe Steel)

3. State Design Institute for the Coke Industry (GIPROKOKS)
   - Dry coke quenching (Nippon Kokan, Italimpianti, Altos Ornos)

4. EO Paton Institute of Electric Welding
   - K355 flash butt welding machine (Holland Corp., Plassert Theuer)
   - Electroslag remelting (Cabot, SKF, Creusot Loire and others)
   - Plasma arc remelting (new technology being marketed in U.S. and subject of intergovernmental exchange)

5. Leningrad Polytechnic Institute
   - Graphite furnace (Perkin Elmer)

6. Tallin Branch of Fishing Industry Central Design Bureau
   - Automatic net stitching machine (Norsk Fiskeredskapsindustry)

7. All Union Research and Design Institute for Aluminum Magnesium and Electrode Industry (VAMI)
   - Diaphragmless electrolyzers (American Magnesium)
   - Process for making alumina from alunite (Alumet Corp.)

8. Zaporozhe Titanium Institute
   - Production of spongy titanium (of interest in U.S. and England)

9. Kuybyshev Iron and Steel Works
   - Electromagnetic casting

10. Hydrodynamic Institute of the Siberian Branch of the USSR Academy of Sciences
    - Pulsed water jet cannon (Joy Mfg., Terra Space, Inc.)
    - Immersion centrifuge for tin & lead (Estano Electro)

11. Institute of Nuclear Physics of the Siberian Branch of the USSR Academy of Sciences
    - Electron beam gun (Energy Sciences, Inc., Gottfried Reuter Holding)

12. Institute of Metallurgy and Metal Enrichment of the Kazakh Academy of Sciences
    - Vacuum technology for producing ultra pure lead and tin (Metalurgica de Nordeste, Estano Electro)

13. Central Scientific Research Institute for Ferrous Metallurgy (TSNIICHERMET)
    - Central continuous casting (Kobe Steel)
    - Ultrasonic refining (of possible interest to West)

14. All Union Research Institute for Machines for Synthetic Fibers (VNIISV)
    - Nylon 6 (Zimmer A.G.)

15. All Union Institute of Wine and Liquers
    - Automatic wine champagnization (Moet Chandon, Iprode)

16. Ukrainian Research Institute of Chemical Engineering
    - FPKM filter press (Hoesch, Dart Industries)

17. Krylov Institute (Leningrad)
    - Bulb bow design (astano)

18. Leningrad Institute of Fine Mechanics and Optics
    - Vibrorolling (of interest to U.S. firms)

19. All Union Research Institute for Eye Diseases
    - Goniopuncture (looked at by Cavitrone in U.S.)

20. All Union Research Institute of Surgical Instrumentation
    - Stapling instruments (U.S. Surgical Corp.)

21. Lebedev Institute of Physics
    - Developing laser tubes for color TV (one Western firm interested)
    - Synthetic diamond production (has been of interest to various U.S. firms)

22. Uralmash Works (in Sverdlosk)
    - Continuous curvilinear steel casting (Kobe Steel)

23. Institute of Protein Chemistry of the USSR Academy of Sciences
    - Microcalorimeter (used by Yale University)

24. All Union Research Institute for Gas Production (VNIIPROMGAZ)
    - *In situ* coal gasification (Texas Utilities Services, Inc.)

25. Kurchatev Institute of Atomic Power
    - Magnetic impact bonding (Maxwell Laboratories)

26. Institute of Super Hard Materials (Kiev)
    - Elbor, Composite, Carbonado (A. Hempel)

27. Kazan Compressor Works
    - Turbo cooling machine which operates on atmospheric air (of interest to Airco, Carnegie Mellon, Gutehoffnungshutte)

28. Hydraulic Coal Mining Institute (VNIIGIDROUGOL) in Novokugnets
    - Hydraulic Mining Technology (Kaiser Resources Ltd)

This list is based on Soviet sources which indicate a certain Institute (or individual) as the originator of the technology and on information from licensees. It is not always clear which are institutes of the Academies of Sciences (either of the Republics or of USSR) and which are industrial or other types of institutes. For a good description of the various types of research institutes see 1969 OECD Study by Amann, Berry et al. It does seem evident that specialized research institutes play a very important role in developing commercial technology.

The CHAIRMAN. Thank you very much. Since I will be remaining until the end, I will defer my questions in turn to Senator Biden.

Senator BIDEN. I really only have one question.

Mr. Brady, on page 4 of your statement you say, "But even before the Communists took power, Russian czars like Peter the Great and Catherine the Great time and again looked to the West for assistance with industrial modernization. We should be mindful that these periods of courting the West did not result in Russia becoming a Western pluralistic nation driven by a market economy with a democratic form of government guaranteeing individual liberties and basic human rights."

You are obviously comparing the effort now being made by Gorbachev with Peter the Great and Catherine the Great, but if my history serves me well we had not even had the industrial revolution when they were seeking this industrial modernization. It did not even exist. When was Peter the Great, 1690 or thereabout? I am not sure.

Mr. BRADY. I do not think there is any question, Senator, but that the Western world was more "industrialized," however you define that, in that period than was Russia.

Senator BIDEN. Well, help me out. Is this about 1690 and about 1780, these two periods roughly?

Mr. BRADY. Probably.

Senator BIDEN. That is the only question that I have, really. It is kind of a stretch; is it not?

Mr. BRADY. No. Absolutely not, Senator. The point I am trying to make is that as the administration, and the committee, bring every possible focus to bear on this issue and attempt to determine what kind of policy we enunciate—I think the worst thing to do, and the trilateral commission report agrees with this—is not to have anything.

We must look at the history, because I think it has a bearing. I classify myself as a conservative, but to a certain extent communism is almost irrelevant. It is a form of government, but it does not alter the basic culture and history of a people.

I think a statement was made a second ago that some of the reforms have had to be changed and adopted because there is resistance on the part of the Soviet population. That is something that we have not even discussed this morning but it is very, very significant because if Peter the Great and Catherine the Great had problems, it was with the domestic population with some of the "Western ideas" and Western assistance they had tried to introduce into Russia at the time.

So, what I am saying is we talk and concentrate on what I call the micro issues; namely, that there is modernization here and we are going to have joint ventures, et cetera. But we still have to come to grips with the question of what our policy should be and how we project on the world a policy to permit a pluralistic international system, hopefully bringing about more democracy, more human rights around the world, in a system that is nonthreatening for the United States? That is our policy.

How do we project that? I believe we project it through linkage of the economic with the political and strategic, and we have a window of opportunity in the next few years like we have never

had before. If we do not use it right, it can go the other way, what I call the negative way; that is the geopolitical concern of centuries that Russia envelops an economically advanced Western Europe.

Senator BIDEN. You sound like Henry Kissinger in 1970.

Mr. BRADY. I disagree with him, sir.

Senator BIDEN. But you sound like him by the linkage of economic and political relationships.

Anyway, I do not disagree with the need for policy.

Mr. Sherr, I was impressed with your statement. Mr. Kiser, I was fascinated with yours. I did not realize that there was such an organization attempting to set up such a structure. It is fascinating to know that.

I have no further questions.

The CHAIRMAN. Thank you very much.

Mr. Kiser, in connection with the transfer of technology, how many joint ventures would you say there are now between the Soviet Union and the United States? Could you give a rough estimate?

Mr. KISER. Transferring technology in the other direction?

The CHAIRMAN. Yes. Well, in both directions. In other words, a joint venture means that we and the Soviets are in business together.

Mr. KISER. I have not been keeping tabs of joint ventures in any global way. I follow joint ventures that are built around a Soviet technology base and are operating in the West. We are personally involved in developing a joint venture along those lines with the Alfred University in Alfred, NY, to introduce some advanced Soviet ceramics technology over here.

But I would say to date there are no Soviet joint ventures that are based on their technology in the United States that I am aware of. There are a number of licensing agreements, however.

The CHAIRMAN. Mr. Sherr.

Mr. SHERR. Mr. Chairman, there are approximately 20 joint ventures with American firms right now. The number will go up substantially in the next few months.

There is one that I know of that involves the transfer of computer software technology from the Soviet Union to the United States. It is the dialog joint venture so-called.

The CHAIRMAN. Are there any fishing joint ventures?

Mr. SHERR. There is some talk about use of fish for food, but I do not know if that is what you are referring to.

The CHAIRMAN. We had joint ventures, for example, up in New England at the Georges Bank. We had joint ventures with Spain and other countries of this type.

Mr. SHERR. There has been a joint venture that has existed off of the west coast of Washington which is a joint venture under United States law rather than under Soviet law for many years, and that as far as I know is a very successful operation involving American fishing boats and so on and the sale of fish as well as the harvest of it.

I am not aware of any on the east coast.

The CHAIRMAN. I was very struck with your statement about the need for conversion and conversion conferences. In my view I know we have tried to organize a couple in Rhode Island. We realize that

one of the principal obstacles we face is the conversion of these marvelous manufacturing facilities that we have. Maybe Electric Boat someday will be manufacturing railroad cars or freighter submarines instead of attack submarines.

I was wondering what your views were with regard to the possibility of developing a network of conversion conferences across the country and also whether you were familiar with Dr. Seymour Mellman of Columbia University, who has taken a lead role in this.

Mr. SHERR. Yes, I am familiar with Dr. Seymour Mellman, and I could not gather what your first question was.

The CHAIRMAN. Can we move in this direction to encourage, for example, Electric Boat who manufactures wonderful submarines now to manufacture submarines for commercial purposes, maybe freighters with oil in them or railroad cars, things of that sort?

Mr. SHERR. I think this is a great opportunity that is opening up both in the Soviet Union and in the United States. It is one where obviously a great deal of caution has to be used not only from the military point of view but also from an economic point of view. It is not always easy to convert, but I think that the potential is very great and that this is an area actually where the United States and the Soviet Union have a great deal of common interest.

We are both for very different reasons under some tremendous budget and other kind of economic constraints, and this is one area where we can have it all. If we can solve our military problems, we can solve the economic problems and not pay extra for it.

The CHAIRMAN. Returning for a second to the question of the joint ventures, what, Mr. Sherr, do you think are the most promising joint ventures just now; in what fields?

Mr. SHERR. From an economic point of view, the most promising are those in the energy area and other areas where the hard currency problem is not much of an issue or where the Soviets need some equipment such as medical equipment very badly and are willing to use a device of import substitution, which means that instead of buying a piece of equipment for $100 from us, they buy the components for $30, assemble it in the Soviet Union, use some of it there and export some of it.

The American manufacturer is very happy because that firm is getting all the profit and so on, and the Soviets are happy because of the exports and because of the use inside the Soviet Union; but you have to pick and choose. There is an area of cooperation right now which the law firm of Herron, Burchette in Washington has just signed an agreement with Goskompriroda, which is the state environmental protection agency, to develop all sorts of cooperation in the area of environmental protection, an area that both governments have pursued vigorously since 1972 through the Cold War, through the ups and the downs. I think that is a very promising area as well.

The CHAIRMAN. Returning to Mr. Kiser for a moment, is your business unique or do you have any competitors?

Mr. KISER. Yes, sir. No, it is not unique. There are other companies that are engaged in technology brokering and include in their sphere of activity accessing opportunities out of the Soviet Union. There is one in Salt Lake City, Diversified Technology. There is another company in New York called Considar. There are some Euro-

pean companies. There is a company down in Aiken, SC, that is focusing on Soviet medical technology.

I think we are different from these other companies in that we have an exclusive focus on the Eastern bloc and have built our business around that alone, whereas other companies either become a one-product company—they find a winner like soft contact lenses or surgical stapling guns, and they just build a business around that and get into that business. I am more interested in the institutionalization of the process to keep this going and to expand the horizons into government.

If you are interested, we are working with some government agencies who have identified significant achievements in the Soviet open literature, and what we have done is say, well, why not just walk through the front door and ask them if you can buy this. If they are writing about it, it could not be too secret. This has been a somewhat revolutionary notion for many government agencies who were not accustomed to walking through the front door.

The CHAIRMAN. Thank you, Mr. Brady, Mr. Sherr, and Mr. Kiser very much for being with us.

This brings today's hearing to a close. The committee is adjourned.

[Whereupon, at 12 noon, the hearing was adjourned, subject to the call of the Chair.]

APPENDIX

FORUM ON U.S.-SOVIET TRADE RELATIONS

Remarks by
Minister-Counselor Yevgeniy G. Kutovoy
Embassy of the USSR

April 6, 1989
Washington, DC

"*Perestroika* in Soviet Trade Policy:
Prospects for US-USSR Business Cooperation"

Mr. Schmidt, Mrs. Chapman, ladies and gentlemen:

I am grateful for yet another opportunity to share with you my thoughts on USSR-US trade and economic relations and my cautious optimism in this regard based on some meaningful developments.

It was two years ago that I first took part in the American Committee's Trade Forum, and it is heartening to see meetings like this becoming a tradition. I see many familiar faces in the audience, and I appreciate your kind attitude towards me. In the spirit of *glasnost*, I will be very frank with you in my remarks.

It is obvious that the quickening pace of the *perestroika* processes in the Soviet Union, and our new political thinking, are having a profound positive impact on the whole spectrum of bilateral relations between the USSR and the US. I would like to stress specifically my personal impression, drawn from conversations with distinguished representatives of the American business community, that there is a growing awareness in various U.S. circles that the policies of *perestroika* in the USSR are being pursued seriously and on a long-term basis.

Perestroika in the Soviet Union is the result of an analysis by the political leadership in our country, and the Soviet people, of the profound changes that are ushering in the world's graduation to the age of high technology and the decisive role of science and intellectual effort. We would like to impart to our system, and I quote from the address of Mikhail Gorbachev in Havana, "a new qualitative dimension that would meet the highest standards of humanism and progress."

Elections on March 26 of the people's deputies to the new legislative body of our country were an important milestone in our movement forward. They were held in a unique atmosphere unknown to the traditions of my country throughout its history, and they produced results that will be studied for a long time by Soviet and foreign experts.

The Plenum of the CPSU Central Committee held last March charted agricultural policies that will ensure in the coming years a stable supply of foodstuffs for the population.

We are in the process of changing our structural policy, redistributing resources to boost light industry and the manufacture of consumer goods.

Successful political reform would afford us an opportunity to put more emphasis on the radical restructuring of the economic mechanism of the Soviet Union.

It is gratifying to note that the world community of states has recently succeeded, through its joint efforts, in moving the hand of the barometer toward the "fair" mark. This is a justification for further worldwide joint actions.

The Soviet-American political dialogue has reached a new level. As a result of the summit meetings in Washington, Moscow, and in New York, our countries have for the first time started real disarmament, thus demonstrating that it can be a viable alternative to the unbridled arms race.

On the basis of new political thinking, solutions have been found to a series of protracted regional conflicts.

Humanitarian issues are the subject of much more intense discussions between our two countries. Our contacts within the framework of "people's diplomacy" have expanded, as have our exchanges in cultural fields.

During their recent meetings the leaders of our two countries paid substantial attention to discussions of the possibilities for expanding bilateral trade and economic relations.

The Soviet Union attaches great importance to a more effective use of such an essential mechanism in our interaction as the US-USSR Joint Commercial Commission. This year the Commission will meet for its regular session here in the United States. We hope that the forthcoming session will focus on problems and obstacles that are impeding progress in our commercial relations.

Regular workshops involving representatives of government departments and the business community to discuss various problems of bilateral trade and economic development should be seen as another positive factor in our relationship. By the way, I very often envy my friends from the U.S. business community who say to me, "Several days ago I was in Moscow," or "next month I will be going back to Moscow," etc. We poor diplomatic servants here have so rare an opportunity to go home, except occasionally on home leave!

The US-USSR Trade & Economic Council plays a very important and fruitful role. The Soviet political leadership, and personally Mikhail Gorbachev, attach great importance to the activities of this forum of Soviet and American businessmen. The Council will hold its twelfth annual meeting in Washington in mid-May. We hope it will be another very

important stage in economic and political terms, and that this gathering will promote closer links among businessmen of our two countries.

I would like to put special emphasis on the new forms of trade and economic relations, in particular joint ventures in the Soviet Union involving foreign capital. This has been promoted actively by the Soviet side. According to the latest data, which of course change almost every day, there are at present 255 joint ventures with Western partners in the Soviet Union. These include 16 with U.S. capital, and 50 more projects at various stages of consideration.

A major development in this area was the signing of the General Agreement on March 30 between the American Trade Consortium--including such well-known U.S. companies as Chevron, ADM, Eastman Kodak, Johnson & Johnson, RJR Nabisco and Mercator--and the Soviet Foreign Economic Consortium. This Soviet consortium comprises a whole range of Soviet ministries, including the Ministry of Automobile Industry, the Ministry of Geology, the Ministry of Chemical Industry, the Ministry of Petrochemical Industry, the Ministry of Instrument Building, the Ministry of Oil Industry, and others.

Twenty-five joint ventures are planned within the framework of the consortia, with total investments amounting to billions of dollars over a 15-year period and dozens of billions of dollars in profits. At a meeting on March 30 with a delegation of executives from the American Trade Consortium, the Chairman of the USSR Council of Ministers stressed that the General Agreement can add a qualitatively new dimension to Soviet-American business ties and set a good example for expanding their framework and directing bilateral economic cooperation in the solution of both long-term and current problems.

Since January 1987 when the law on joint ventures was adopted in the Soviet Union, procedures for the establishment of joint ventures in our country have been substantially simplified. I was requested to discuss these simplifications in my presentation today so that this audience could learn of the changes in Soviet legislation.

--Previously the USSR Council of Ministers authorized the establishment of joint ventures, and later the ministries, departments and Union Republics were responsible for them. Today enterprises and cooperatives need only to obtain approval from their superior body of administration.

--Initial restrictions on the share of a foreign partner in the statutory fund in a joint venture have been abolished. Presently the shares of Soviet and foreign participants in this fund are defined by agreement between them; i.e. the requirement for a 51% share for a Soviet participant has been dropped.

--Representation of foreign partners in the administration of joint ventures has been made much more democratic. Now the Chairman of the Board or the General Director of a joint venture may be a foreign citizen. (Previously both posts, you may remember, were reserved for Soviet citizens.)

--Joint ventures have been given a free hand in deciding on matters of hiring and firing of employees, on wages and incentives policies. Previously all matters had been regulated solely by relevant Soviet laws.

--Taxation of joint ventures has been greatly eased. At present there is an overall 30% profits tax, but a joint venture may be granted a tax exemption period of two years

starting from the time when profits are first obtained. The USSR Ministry of Finance has been authorized to levy no tax on part of the profits transferred by a foreign partner abroad or to lower it (the current tax level is 20%). This provision shall be primarily applicable to joint ventures whose products are considered to be essential for the Soviet economy (for example, consumer goods, medical equipment, high technology products) and also to all joint ventures located in the Far Eastern economic region of the USSR.

--The requirement for prior approval for the transfer of a share in joint ventures to a third party has been abolished. Earlier such approval was required in each case from a relevant ministry or the Council of Ministers of a Union Republic.

In addition to the legislative changes, much has been done by the Soviet side to improve the conditions for foreign businessmen, including Americans, in the Soviet Union:

--Procedures for issuing visas to enter the USSR, including the issuance of multi-entry visas, have been simplified.

--Movement of foreign missions' representatives in the territory of the USSR has been made easier.

--A number of previously closed areas in our country have been opened to visitors.

--In 1987-88 we granted requests by three U.S. companies to increase their personnel quotas in Moscow.

Despite the emergence over the past two years of new forms of cooperation, the level of trade and economic interaction between our two countries continues to be unsatisfactory compared to the real possibilities. The volume of our bilateral trade stays within $2-3 billion--something like the cost of goods crossing the U.S.-Canadian border in just one week's time.

The dynamics of our bilateral trade continues to depend on our grain purchases in the United States. This is really no firm basis for a long-term development of trade.

Also, the balance of trade favoring the United States is increasing. True, Soviet exports to the U.S. grew somewhat in 1988, reaching $499 million (compared to $443 million in 1987). However, the absolute growth was insignificant, just over $50 million. USSR exports are still largely based on precious metals, energy, and other commodities including fertilizers and furs.

Yet at the New York Export Exhibition in December 1988, we showed over 4,000 types of goods that we would be prepared to export to the United States. More than 12,000 U.S. businessmen visited the exhibition, and over $200 million worth of contracts were concluded. But this is still much too little compared to the existing potential of our countries.

We are often told that the Soviet economic system is incapable of producing things that could compete in the American market. It is true that our organizations and enterprises lack the knowledge of U.S. commercial conditions, and that sometimes they are not sufficiently responsive to the tastes and needs of the American consumer. We are trying to improve this situation.

This, however, is not what causes the unsatisfactory situation. The real reasons have to do with the political legacy of the past, with the fact that in the absence of most-favored-nation (MFN) treatment the duties on many Soviet exports goods exceed those on similar goods from other countries by a factor of 5-7--and in some cases even as much as 10. You understand how difficult this can be.

Or, take another example: Soviet organizations are sufficiently competitive in international markets in the area of commercial satellite launch services to be ready for mutually beneficial cooperation with interested U. S. companies. However, here, too, we have to deal with a negative attitude. The formal argument that we hear is that this could lead to leaks of sensitive technologies. This is being stated although we have declared on various levels our willingness to provide the necessary and verifiable guarantees. Incidentally, those questions are dealt with easily in cases involving other countries.

Development of bilateral trade is also inhibited by the existing system of controlling technology exports to our country. According to American estimates, at present over 100,000 types of goods and technology exports to our country are covered by such controls.

Certainly any state is entitled to determine what should or should not be included in bilateral trade with any of its partners. However, when the term "strategic merchandise" is being artificially stretched, the result is a reduced potential of mutually beneficial trade. If we look at sales of American technology to the Soviet Union in the 1970s, they became a tiny stream. During the past ten years the average annual level of U.S. machinery and equipment exports to the Soviet Union has been in the vicinity of $300 million. (That is approximately 0.3 % of the total U.S. exports last year.) In addition, about half of the U.S. exports to the Soviet Union consists of spare parts for previously sold equipment.

Nevertheless, it is namely technology exchanges in different forms that potentially might become the most dynamic area of Soviet American trade and economic relations. I would just like to mention one very important fact here, and that is that the Soviet Union is planning to double the value of its foreign trade before the year 2000. The main emphasis will be on finished goods.

Over the past two years we have made serious progress in radically reforming the Soviet foreign trade mechanism. Export and import operations and industrial cooperation with foreign partners are no longer considered to be the privilege of a closed circle of organizations; they are becoming the "natural right" of all producers of merchandise and services. A week ago all the enterprises, organizations, and industrial cooperatives in the Soviet Union were given the right to operate independently in international markets. U.S. companies now can deal directly with producers of their merchandise as well as their consumers in the Soviet Union.

Presently, efficient instruments of our foreign economic policy are being worked out. Those instruments will be based on effective customs tariffs as well as different nontariff regulations, such as licensing and export and import quotas, for certain types of goods.

It is also assumed that the new customs tariff, which will be in force in 1991, will be used in the price formation for import goods and services as well as the basis for international trade negotiations--including those with the GATT. It would be quite natural to assume that the countries that do not have a MFN agreement with the Soviet Union will confront higher tariffs for their goods in the Soviet market.

In the course of the next one-and-a-half to two years, a series of laws will be adopted to widen the legislative groundwork of Soviet international economic relations. This will include legislation on joint-stock companies, on the rules of competition, on currency regulations, and on the business activities of Soviet enterprises and organizations abroad. There are plans to complete this work in 1990 with a law on foreign trade and other types of international economic activities.

Some measures are being taken to implement more economic methods in the management of foreign economic relations. The first step was taken toward the creation of a currency market in the Soviet Union in addition to the existing system of centralized distribution of hard currency by the state. For this purpose, so-called "currency auctions" will start functioning in the near future under the auspices of the Soviet Foreign Economic Bank.

The problem of the convertibility of the rouble in general is drawing a lot of attention. People are discussing this everywhere--even in cafes and in lines at the shops in the Soviet Union. Nobody knows what convertibility means, but there is a joke around that it will mean something tasty in their mouths!

Closely connected to the reform of the Soviet foreign trade mechanism is our new approach towards USSR participation in international economic organizations, primarily the GATT, that are regulating global financial and trade relations. As you can understand, however, it is very difficult to enter into the world trade system if, so to speak, its door is locked from the inside. We consider our participation in GATT affairs--first as an observer--as an opportunity to take into account more fully the principles and practices of the multilateral trading system in the development of our own instruments for regulating foreign economic relations and as a means of "adapting" to the existing "rules of the game" in the international marketplace.

Some U.S. experts and businessmen express the view that our rapprochement with the GATT could be in tune with American interests because it would increase the level of economic interdependence between the USSR and the West. This in turn could have a stabilizing effect on the world political climate. It is difficult not to agree with this thesis. We believe that it is high time to steer this problem in the direction of seeking reasonable, mutually acceptable decisions.

It is impossible not to mention one more promising direction in the development of our bilateral trade and economic relations, and that is business interaction between the Soviet Far East and the American West. Our country has been putting more emphasis recently on trade and economic relations with the Pacific Rim region.

It seems that our Far East will be the first proving ground for developing and testing such new forms of business cooperation as "free enterprise zones." There we intend to concentrate joint ventures by creating additional economic advantages. Specific proposals on the future status and location of these zones will have to be studied by your government during the coming months. It is quite demonstrative that we already have proposals from several American companies on establishing business connections in the Far East in the areas of hotel construction and management and the development of tourism.

There are plans to hold a high-level conference in San Francisco during the second half of May to discuss the possibilities of developing business connections between Soviet organizations and American companies in the Far East.

Concluding my remarks, I would like to stress that both sides should move toward new horizons of Soviet-American trade and economic cooperation. Both sides should put forward constructive ideas that will give the necessary dynamism to our relations in this area.

We stand for a creative approach toward the development of trade and economic relations with the United States based on the principles of equality, mutual benefit, and nondiscrimination. We are committed to the development of these relations. We are convinced, and our views are supported in U.S. business circles, that it is unnatural for the two great powers to ignore each other, that trade and economic relations in themselves are a powerful factor that moves us towards stable peace. Let us continue to move forward on this basis.

Thank you for your attention.

####

Following Minister Kutovoy's remarks, the following discussion took place:

Questioner: What do you think would be the single most important step the United States could take to improve trade relations with the Soviet Union? Would it be the MFN question, the injection of capital, or what?

Min. Kutovoy: It is of course up to the United States to make this determination. I was speaking only from the Soviet perspective. But I can say from our point of view that the absence of MFN treatment is the major obstacle in the way of the development of trade and economic relations between our two countries.

Questioner: In this regard, Mr. Minister, one of the things that people here are watching for is the codification of the emigration law. Do you expect that to occur anytime soon?

Min. Kutovoy: At the present time we are in the process of elaborating a number of laws, including the laws that are related to the departure of our people from the Soviet Union. Many changes in this regard have taken place already. As to when this important legislative work will be finalized, you must understand that it is up to the highest legislative body of the Soviet Union to put the stamp on this law itself. As a result of the elections on the 26th of March this year, there will be additional voting in a number of districts. So this process will be delayed. The Congress was supposed to be convened in April. Now this will be postponed because the elections will continue from April 9 until May 15. After the completion of the election process the new body will be convened, and the new body--the Congress of the People's Deputies--will elect the Supreme Soviet of the USSR, the President of the Soviet Union, and the First Vice President. So I cannot give you the exact timing, but this will be done and is in the process of finalization.

Questioner: You mentioned the difficulties for U.S.-Soviet trade which come from the restrictions on technology transfer. On the 28th of February the Department of Commerce revised its regulations to eliminate unilateral controls that the U.S. had imposed that went beyond those of other Western nations. In so doing they did not define what the remaining controls were, so it is a little ambiguous. Do you have any reaction as to the effect of this recent action which does go in some degree towards what you were suggesting.

Min. Kutovoy: I'm afraid that at this time I personally cannot give you an answer to this important question. I might ask our trade representative in the audience if it has had an effect. Mr. Kozhevnikov?

Mr. Kozhevnikov: Not yet .

Questioner: You spoke about the desire of many people to know about the convertibility of the rouble and their feeling that this would be desirable. It is our understanding here that when the convertibility takes place there will be very extensive price increases for commodities in the Soviet Union. Do you think that is politically possible?

Min. Kutovoy: At the present time we continue to study this important policy. We agree with you that it will be necessary to make rather significant adjustments. One problem will be to increase the amount of consumer goods available in order to balance the money and goods. I remember that two years ago in this Forum I mentioned the very high amount of savings among the Soviet population. This has not changed significantly, and in fact has probably increased. That is exactly the reason we have to study such a transition. The convertibility will take quite a long time, because we will first have to adjust the prices within our own country and adjust to the world markets. We will also have to study how this will influence certain enterprises, certain goods, and how this will affect the well-being of our people. There are various ideas on how to do this. For example, Academician Aganbegyan, whom most of the people in this room know very well, has made some suggestions, as have others. The political decision is that we should go ahead, and our economists are working very hard on this important subject.

Questioner: What is the Soviet Union doing to relate to the European Economic Community in 1992, both individually and as part of the CMEA group?

Min. Kutovoy: As you know, we now have our own representative to the EEC, and apparently he is discussing this issue. I can't speculate on what steps will be taken or what effect it will have. We will just have to adjust. As you are aware, our trade with the European countries is increasing, including with those that are members of the EEC. I would say, and I hope without offending the members of the U.S. business community in this audience, that our trade relations are going very much better with the West Europeans. For example, there was a period of time when the U.S. business community was at the top of the list of countries having joint ventures with the Soviet Union. Now I think it is only the fourth or fifth on this list. We have just recently concluded agreements on twelve joint ventures with Italy, making a total of over thirty with Italian capital. In fact, the Italian Minister recently visited the Soviet Union with our Minister of Foreign Economic Affairs, and they announced that they would reduce the list of so-called prohibited goods for export to the Soviet Union immediately by 950 items. Similar expansion in joint ventures is taking place with the British, the West Germans, and others.

16 April 1989

THE BUSH ADMINISTRATION RESCUE PLAN FOR POLAND: SHOOTING OURSELVES IN THE WALLET?

Introduction

The Bush Administration is expected imminently to announce a package of well over $1 billion in economic and financial benefits for Poland from the United States and multilateral organizations. It is reported to feature:

- special assistance for Poland through a $250 million World Bank program and a $300 million disbursement under an International Monetary Fund (IMF) program;
- special tariff exemptions for U.S. imports of Polish goods through the Generalized System of Preferences (GSP);
- $250 million in U.S. trade financing through government guaranteed loans;
- U.S. government-backed insurance and loans in support of American private investment in Poland, i.e., through Overseas Private Investment Corporation (OPIC) program eligibility; and
- U.S. support for the rescheduling of $700 million (and eventually billions more) of Poland's external debt in the Paris Club of government creditors.

In light of recent developments in Poland, the Bush Administration's desire to foster greater freedom for the Polish people and encourage freer markets is understandable. Its planned initiatives meant to advance these objectives, however, are open to serious challenge on four grounds: the tasks expected of the International Monetary Fund; the new burdens likely to be imposed on Western taxpayers; the financial "free-ride" provided the Soviet Union; and adverse impact on U.S. interests in developing countries.

Problems With the Bush Administration Plan

Can The IMF Solve Poland's Economic Crisis?

The most significant flaw in the Bush Administration's new Polish plan is its call on the IMF to help solve Poland's economic problems by serving as the enforcer of economic austerity and catalyst for Western investment there. What is actually required to salvage the Polish economy -- namely, fundamental systemic reform -- is, for all intents and

purposes, outside the IMF's mandate. Far from eliminating the present crisis, a traditional IMF-style approach will almost certainly not produce the desired economic transformation; it may, moreover, serve to introduce still more serious societal upheaval.

The principal reason for such a pessimistic assessment is that the IMF and World Bank are obliged in structuring their programs to take as a given the existing political and economic systems of prospective borrowers. Accordingly, where the IMF has been involved in the past with socialist countries, it has been unable to tie its assistance to the creation of genuine free-market economies. Instead, the International Monetary Fund is essentially confined in such lending to utilizing austerity-oriented adjustments -- fine-tuning macro-economic policies -- that amount to tinkering on the margins of failed economies. Examples include:

- Successive IMF programs for **Yugoslavia** which currently has an annualized inflation rate approaching 1,000 percent.

- Notwithstanding past IMF involvement, **Romania** remains a Stalinist command economy ravaged by collectivization and other inefficiencies.

- Repeated IMF programs to which **Hungary** has subscribed since the early 1980's -- a nation that today has a level of per capita indebtedness even greater than that of Poland (on the order of a $19 billion gross hard currency debt burdening a population of roughly 10 million).

Like its sister socialist economies, Poland has previously experimented unsuccessfully with austerity measures unaccompanied by profound structural change. Although not implemented under IMF auspices, several of the methods typically utilized by the IMF have been tried at the urging of Western creditors. Notably, raising prices, holding down wages and similar measures provoked large-scale labor unrest -- but not measurable improvement in economic performance -- under the regimes of Gierek, Kania and Jaruzelski.

As yet largely untouched are the structural contributors to Poland's economic stagnation, for example:

- Key heavy industries (e.g., mining and manufacturing, shipbuilding, etc.) that remain state-owned and -controlled -- a bottleneck that "workers self-management" cannot overcome;

- Thousands of unproductive agreements between Polish and other Soviet bloc enterprises that waste precious resources under rigid, pre-set plans;

- Disproportionate Polish investment in the military (approximately $14 billion annually in 1986, the last year for which such data are publicly available) and uncounted billions more to support the nomenklatura and a bloated government bureaucracy.

The foregoing does not gainsay the vital role played by the International Monetary Fund where its austerity measures and other macro-economic adjustments can work. Indeed, **IMF programs have produced substantial and enduring economic progress in many developing countries -- where there is a viable private sector unfettered by excessive governmental controls.** However, particularly in nations like those of Eastern Europe, where the burdens of ideological and institutional constraints are so pronounced, the utility of the IMF and its tools is exceedingly limited.

Are Western Taxpayers Going to Foot the Bill?

It is striking that the Bush Administration and the allies, in proposing these economic initiatives toward Poland, are calling for such steps only a few short years after the American taxpayer was obliged to pay in excess of a billion dollars to cover Poland's de facto default on debt to the U.S. Export-Import Bank, the Commodity Credit Corporation, and other U.S. government-backed programs.

- The economic implications for U.S. taxpayers of this latest bail-out scheme for Poland will be **greater still** for it comes in the midst of several, potentially staggering financial demands on U.S. tax revenues:

  -- a probable $100 billion-plus price tag over the next ten years related to the savings and loan crisis;

  -- an estimated $25-50 billion over the next five years from losses incurred in connection with the $1.3 trillion international debt crisis;

  -- and possibly billions of dollars of lost tax revenue due to the failure of companies purchased under bank-financed leveraged buy-outs, following a rise in interest rates -- or even a mild recession.

- A substantial portion of these ominous taxpayer liabilities is the result of woefully inadequate discipline in government and commercial bank lending policies, both domestically and internationally.

Will the Soviets Get A "Free-Ride"?

As it now stands, the Administration is making no demands that Soviet hard currency credits, loan guarantees and related commitments accompany Western economic and financial assistance to Poland.

- This glaring omission facilitates the Soviet Union's effort to "internationalize perestroika," i.e., to off-load the financial obligations of its impoverished allies and client-states from Soviet books to Western balance sheets.

- This is the more ironic insofar as the Soviet Union bears enormous responsibility for Poland's present economic crisis.

  -- It has served as the model of the autarkic command economy that East bloc countries like Poland have largely been forced to emulate.

  -- The Soviets have long pressured Poland to increase its participation in COMECON, the Soviet bloc's economic community, in high technology and trade cooperation.

     oo Total trade turnover between Poland and Soviet bloc (COMECON) countries amounted in 1987 to $35.7 billion -- nearly twice the $20.1 billion run up in 1980. During the corresponding period, Poland's trade with developed countries actually dropped from $12.6 billion to $10.2 billion.

     oo These figures indicate that the Polish economy may, ironically, be being further absorbed into Soviet-controlled COMECON economic relations -- despite the West's policy of "differentiation," whose stated aim is to "wean" Eastern Europe away from the Soviet orbit.

  -- The Soviets have, compared to the West, been relatively niggardly with their financial assistance to Poland (e.g., no effort made to reduce prices charged for Soviet oil, or to cut claims on higher quality Polish exports -- goods that might otherwise be sold in hard currency markets, etc.) since the onset of the crisis in March 1981.

Will U.S. Equities in Developing Countries Be Jeopardized?

The industrialized West's decisions aimed at assisting Polish perestroika coincide with the emergence of severe economic and political dislocation in Mexico, Venezuela, the Philippines

and other developing countries -- all of whom desperately need to make progress in implementing serious debt reduction and "new money" programs.

- For too long, the West has, in some key categories, accorded Warsaw Pact borrowers preferential treatment (i.e., better credit terms and access to fresh credit flows) over those of Latin American and other democracies.

  -- For example, the Polish government's practice of paying interest on commercial bank loans while withholding interest payments to government creditors is a dramatic departure from practices agreed to in debt negotiations with non-communist countries.

  -- Permitting this arrangement to continue, in effect, subordinates Western taxpayers to private commercial banks when it comes to repayments on outstanding debt.

An Alternative Plan

Since the Bush Administration's planned package of economic and financial assistance to Poland may have unintended and undesirable repercussions both for the Poles and for the American taxpayer, a different package of initiatives is urgently needed. An alternative plan should be implemented that is designed to advance U.S. and Western interests in true reform in Poland while: limiting taxpayer liabilities, denying the Soviets a financial "free-ride," defending equal -- or better -- treatment for developing countries and minimizing the prospects of yet another "false start" on Poland's road to radical political and economic reform.

Key features of such an alternative plan would be:

Properly Utilizing the IMF

- Release of IMF funds should be withheld pending a demonstration by the Polish leadership over the next six-months of its willingness to implement fundamental reforms such as:

  -- Massive privatization of the Polish economy, including key heavy industries and agriculture;

  -- The reallocation of priority resources away from the military sector and unproductive COMECON endeavors to the destitute civilian economy;

    oo An important and visible feature of this reallocation process would be the conversion of extensive military infrastructure to civilian

production -- particularly weapons production dedicated to supplying Soviet end-users;

oo The Polish government should commit to disengage gradually from COMECON and formulate a realistic program to wind-down its participation in that community;

-- Sharp reductions in the size of the bloated government bureaucracy and the expensive privileges enjoyed exclusively by the nomenklatura -- as opposed to reducing further the living standards of ordinary Polish citizens.

-- Implementation of comprehensive measures designed to address Poland's chronic environmental hazards.

o If and when the Polish authorities demonstrate the political will to implement such a program, the alliance should agree on specific goals -- and specific milestones for achieving these goals -- upon which all disbursements of funds from various sources (e.g., bilateral government loans and credit lines, World Bank co-financing, etc.) will be made contingent.

-- It is crucial that these milestones be publicly identified and debated prior to any "new money" flows so that the West is engaging in a transparent and measurable process of economic assistance.

oo In addition to economic criteria, these milestones should also encompass expanded democratic pluralism and the institutionalization of individual freedoms, including private ownership and transferability of property.

o All Western financial assistance measures intended to stimulate Polish reforms -- such as IMF support, Paris Club rescheduling, OPIC coverage and GSP eligibility -- must be fully reversible in the event of subsequent political crackdowns, financial default, or other missed milestones.

Protecting Western Taxpayers

o A firm alliance agreement is required at the outset of these new initiatives to insulate Western taxpayers to the maximum extent possible from the consequences of potential default or successive debt reschedulings on the part of the Polish government and associated enterprises.

-- Western government creditors should, in all cases, be accorded equal or pari passu treatment with private bank creditors in debt rescheduling negotiations.

o A financial rescue package for Poland should not transfer risks to Western governments and taxpayers as a way of covering and thereby encouraging loans from the commercial banks.

-- Interestingly, the finance ministers of several important U.S. allies (notably the United Kingdom and the Netherlands) object to such a transfer of risk to governments and taxpayers (including through the IMF and World Bank) that is a feature of the Brady Debt Reduction Plan for developing countries.

Ensuring that the Soviets Bear Some of the Costs

o The Western allies should secure Soviet agreement to provide Poland with extensive hard currency credits for projects and other purposes requiring hard currency within Poland. In this way, finite IMF/World Bank resources can be husbanded to meet the enormous claims of the developing world.

-- To meet the Soviet Union's substantial financial responsibilities for Poland, the allies should also urge Moscow to set aside a multi-billion dollar collateralized hard currency account (e.g., funded by pledged oil and gold-generated revenues) to cover Western creditors in the event of Polish arrearages under the new program.

o The allies should insist that the Soviet Union cut further its oil prices for Poland and that Warsaw be excused from large Soviet/COMECON projects, either underway or contemplated, particularly in the energy and high-technology fields.

Protecting U.S. Equities in the Developing World

o Soviet bloc countries should obtain no more favorable terms on or access to Western financial flows than those offered fledgling democracies in the developing world.

-- Such an arrangement would reduce the prospects of Mexico, Venezuela, the Philippines and other countries being disadvantaged in their quest for serious debt reduction.

-- The terms and conditions of any further Paris Club reschedulings for Poland -- a form of debt relief that should be withheld for the six-month trial period

called for above -- must be publicly debated before they are finalized.

oo Otherwise, the West is in jeopardy of creating additional precedents for mechanisms whereby preferential economic and financial treatment is provided to Soviet bloc countries.

Conclusion

New Western financial resources for Poland should be withheld if it becomes evident that the Polish government is engaged in provocations designed to undermine the credibility of Solidarity and other fledgling democratic organizations. In this connection, some observers believe that the Jaruzelski regime may be cynically offering the opportunity for expanded political participation to Solidarity and other such organizations at a time when radical economic restructuring will necessarily spawn economic hardship and fierce political resentment on the part of the Polish people. The predictable backlash could actually help Jaruzelski discredit the independent trade union movement in Poland -- while at the same time reinvigorate the weakened communist party.

As they are asked once more to assume substantial financial exposure in order to assist the more destitute regimes of Eastern Europe, Western taxpayers should keep in mind one fact: **the current economic crisis in Poland has been deepened by undisciplined Western largesse over the past fifteen years or more.** The temptation to respond again to Eastern regimes' liberalization half-steps with renewed, imprudent capital and technology flows would amount not only to throwing good money after bad; it will likely retard political and economic reform in Poland and elsewhere. The only hope for genuine reform in the Soviet bloc is the adoption by the United States and its allies of security-minded policies designed greatly to increase the discipline and transparency of all Western economic, financial and technology transactions with the USSR and its clients.

The Center for Security Policy is a not-for-profit, non-partisan educational corporation established in 1988. It exists to assist those in the executive and legislative branches of the United States government, in the press and among the general public concerned with foreign and defense issues in promptly understanding and addressing strategically significant security developments.

THE BOARD OF ADVISORS

Elliot Abrams
Rachel Abrams
Morris J. Amitay
Robert Andrews
Frank Barnett
Linden Blue
Stephen D. Bryen
Beverly B. Byron
Tom Clancy
Jim Courter
J.D. Crouch
Mitchell E. Daniels
Midge Decter
Ken DeGraffenreid
John Duncan
Jon Englund
Charles Fairbanks
Mark Falcoff
Douglas J. Feith
Edwin J. Feulner, Jr.
Frank J. Gaffney, Jr.
Patrick Glynn
Andrew Goldman
Margaret Graham
Colin S. Gray
Nancy D. Greene
James T. Hackett
DeForest A. Hamilton
Amoretta M. Hoeber
Marc L. Holtzman
Henry J. Hyde
Fred C. Ikle
Jamie Jameson
Alan L. Keyes
George A. Keyworth II
Jeane J. Kirkpatrick
Sven F. Kraemer
Charles Kupperman
Jon Kyl
John Lenczowski
James C. McCrery
Bob McEwen
Kinnaird R. McKee
Philip Merrill
J. W. Middendorf III
Michael H. Mobbs
Josh Muravchik
Keith B. Payne
Amos Perlmutter
Richard Perle
Robert R. Reilly
Roger W. Robinson, Jr.
James Roche
William Schneider, Jr.
Bernard Schriever
James Sherr
Abram Shulsky
Max Singer
Jed Snyder
Henry Sokolski
Rob Soofer
Herbert Stein
Richard G. Stilwell
Howard R. Teicher
Edward Teller
William Van Cleave
Michelle Van Cleave
Malcolm Wallop
James H. Webb, Jr.
Michael L. Weinstein
Seymour Weiss
Curt Weldon
Faith Whittlesey
Pete Wilson
Curtin Winsor, Jr.
James L. Wolbarsht
Dov S. Zakheim

The Center's working paper on the coming Polish economic bail-out is one of a series of occasional contributions by the Center for Security Policy to the national debate on foreign policy and defense issues. Such contributions are intended to invigorate and enrich that debate; they do not necessarily reflect the views of all members of the Center's Board of Advisors. For more information about these papers or other work of the Center, please contact the Director, Frank J. Gaffney, Jr.

HEARING #5
THE FUTURE OF U.S.-SOVIET RELATIONS DEFENSE AND ARMS CONTROL POLICY

MONDAY, MAY 15, 1989

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met at 10:15 a.m., in room SD–419, Dirksen Senate Office Building, Hon. Joseph Biden presiding.

Present: Senators Biden and Robb.

Senator BIDEN. Good morning, everyone.

We now open our fifth in the series of hearings that this committee hopes will continue to be as enlightening as the first four have been on subjects that it is our responsibility to review and ultimately help make policy.

Our first witness today—and I apologize for keeping him waiting.

We weren't sure whether you were here, Mr. Secretary. Our staff person, Bertie, pointed out that you were back there reading the paper.

I apologize that I was late, and I made it later by assuming that you were somehow delayed.

Our first witness today in a series of distinguished witnesses is the very distinguished former Secretary of Defense.

Mr. Secretary, I have a relatively brief opening statement that I would like to read. Then I will turn to you in a routine that you are so well schooled in, you have probably done as many or more of these hearings as I have, and I have been here for 17 years.

As part of a series of hearings on United States-Soviet relations begun several weeks ago, today and Thursday the Foreign Relations Committee will examine the critical arms control issues we face in the coming years as we try to improve our relationship with the Soviet Union.

The Gorbachev era begins with a tremendous opportunity for arms control. Previous attempts at far-reaching arms reductions were stymied by Soviet advantages in key categories of weaponry and Soviet fears about secrecy that made verification of arms control agreements very difficult.

Now these two obstacles have, if not been totally eliminated, they have been eliminated in the case of the intermediate-range agreement in which Soviet leaders have demonstrated a willingness to go further than we ever had thought, at least further than I had thought to make asymmetrical reductions and to permit intrusive, onsite inspections.

As Secretary Baker learned on his trip to Moscow, this newfound flexibility has brought with it other problems. The striking differences between Gorbachev and past Soviet leaders and his penchant for unilateral and well-timed, and, some would argue, publicity-designed, arms control initiatives, has led to a situation where the United States seems reactive and behind the curve.

I believe the administration is correct, that the United States need not respond to each and every unilateral arms initiative by the Soviet Union. We are not in the PR business. We are in the national security business.

Indeed, while Gorbachev's ballyhooed reductions of 500 short-range nuclear weapons in Europe were suggested on Friday, the fact is that the NATO Alliance has removed several times that many in our arsenal since 1979, and all unilaterally.

At the same time, Gorbachev's initiatives would not resonate so deeply if it did not seem that the United States lacked a coherent program to pursue clearcut arms control objectives.

We need to set out a comprehensive program, not for public relations, but for improving our security.

If we clarify our goals and pursue them vigorously, our leadership role in the NATO Alliance will be assured, and the public relations problems that we are now facing will dissolve, in my opinion.

These hearings will focus on the very question of what a comprehensive, coherent, arms control program should be. We will be exploring the following areas: strategic arms reductions, START; conventional arms cuts, the CFE talks; strategic defenses and the ABM Treaty; and short-range nuclear forces—often referred to by those of us who deal in this a lot, and you, Mr. Secretary, who know it incredibly well, as SNF. But all these acronyms confuse the devil out of the public, at least in my view that is.

I hope to clarify what U.S. objectives should be in these areas and what are the relationships between these four discrete subjects.

While I am not in a position to speak for this committee, or for the chairman, or for the witnesses before us, and I suspect the Bush administration will not agree with all I have to say, let me posit some concrete arms control objectives for the purpose of this hearing.

First is reaffirmation of the ABM Treaty. This treaty is, indeed, critical to strategic stability and an absolute prerequisite to the reductions in strategic offensive arms that we all seek.

While the administration has not yet spoken to the interpretation question, we can only hope that it will not pursue what I believe to be the unconstitutional and perverse reinterpretation adopted by the Reagan administration.

Second is completing the existing START framework.

It seems to me that the treaty framework set up by President Reagan is sound. It greatly reduces Soviet ballistic missile forces and allows us the maximum flexibility to deploy a survivable mix of ICBM's, SLBM's, and bombers.

Third is to pursue an early phase I agreement on conventional arms.

I will not criticize the proposal NATO developed for the conventional arms talks in Vienna. Suffice it to say that it would create a stable conventional balance and greatly transform the geopolitical situation in Europe. But a NATO proposal for a second phase agreement I believe is urgently needed because we have such a historic opportunity.

I believe we should push the Soviet Union as far as we would like to go in determining how far they are willing to go.

Finally is to begin negotiations on short-range forces.

In the realm of short-range nuclear forces, I believe we are making a tragic mistake. The United States cannot be put in the position of announcing a policy that fears negotiations. Indeed, by making clear that short-range nuclear forces are specifically designed to compensate for Soviet advantage in conventional arms, we can establish a firm linkage between the two, holding up reductions in SNF until successes have been achieved in the Vienna conventional talks.

I believe that this would, in fact, enhance the prospects for successful conventional reductions, and at the same time make clear to a generation of Europeans that have yet had it made clear to them what the nuclear strategy of the NATO forces are and why it makes sense.

We seem to be mired down in a fear of democracies. Democracies work.

We all hear so much about how much success we have had in the last 40 years—and we have had success. One of the great successes has been that there is a genuine democracy in West Germany. It seems to me that democracies are based upon the notion of political leadership explaining the rationale for important positions. In this case, I believe such an SNF proposal would give us a great opportunity to explain to not only Germans, but all Europeans, what NATO's rationale is from this point on.

Too much misleading information has been put forward in this area. We are not talking about 88 launchers for NATO versus 1,600 launchers for the Warsaw Pact. Rather, we are talking about establishing equal ceilings below 700-or-so missiles on our side, and 3,000-or-so missiles on their side.

I would hope to explore with you whether or not our objectives in these talks should or should not include zero missiles.

Later this week, we will be discussing these and other issues with former President Reagan's top advisers, Max Kampelman, Paul Nitze, and a number of other witnesses.

I understand Secretary McNamara will be discussing these short-term objectives, as well as longer term ones.

I thank you very much, Mr. Secretary and the rest of the witnesses for my trespassing on your time with my opening statement.

Now let me turn to you, Mr. Secretary, for any opening statement that you may have. And, by the way, welcome. It is a great privilege to have you back before this committee.

STATEMENT OF HON. ROBERT S. McNAMARA, FORMER SECRETARY OF DEFENSE

Mr. McNAMARA. Thank you very much, Mr. Chairman.

I am very happy to have the opportunity to appear before the committee and address the question you posed to me. You asked for my views on the implications for the United States of recent changes in Soviet policies and behavior. I have prepared a statement outlining them.

With your permission, I will submit that for the record, and I would like to introduce it and summarize it for you in perhaps 12 or 14 minutes of opening remarks, after which I would be very happy to try to respond to your questions.

Senator BIDEN. Without objection, your entire statement will be placed in the record as if read.

Mr. MCNAMARA. Thank you.

Put very simply, I believe we face the greatest opportunity in 40 years to shift the basis for the formulation of U.S. foreign policy and U.S. defense programs from "Cold War thinking" to a new vision of superpower relations.

By such a shift, we may be able to enhance global stability, to strengthen our own security, and, at the same time, to produce significant, long-term budgetary savings and the resources to permit a much-needed restructuring of the U.S. economy.

Before discussing the recent shifts in Soviet policy and how those may affect United States policy, I would like to make two general comments with respect to security.

I believe that the first responsibility of our President, any President, the first duty of our Government, is the defense of this Nation. I believe we can support whatever expenditures are required to maintain the military forces necessary to achieve that objective.

But I also believe that our security depends on more than military force. It is a function, as well, of economic strength and social cohesion. Today I want to submit to you that our position in the world is adversely affected by economic weakness and by unresolved and mounting social problems.

As a nation, we have been on an enormous consumption binge. We have been living beyond our means. We have been selling our assets and borrowing both domestically and abroad to finance an unprecedented expansion of domestic spending.

As a result, the rate of increase in our foreign and domestic debt has reached unsustainable levels.

Moreover, while enjoying our consumption binge, we have permitted severe social problems to develop, problems which will plague our society in years to come. We are facing destructive rates of illiteracy, unacceptably high levels of unemployment among teenagers and minority groups, a rapidly growing under class. In this city, for example, the capital of the richest Nation in the world, 51 percent of all births are illegitimate.

We have high and rising rates of drug abuse, drug-related crime, a failure to adequately address the problems of the poor and disadvantaged, severe distortion of sectoral and regional growth patterns, and significant deterioration of our physical infrastructure.

One of the great achievements of our political and social system has been its ability to support political cohesiveness in a society as ethnically diverse as ours. But this stability depends on preserving

a reasonable degree of economic equity among the various social groups.

Recent developments affecting minorities and the economically disadvantaged jeopardize the preservation of that equity.

Now, in the face of these economic and social problems, I believe it would be folly to spend more than we need for defense. I think, further, that Gorbachev has presented us an opportunity to lower the risk of military confrontation between East and West, and, thereby, to lower the cost to maintaining our security. The world of the future will not be free of conflict. But we should probe the extent to which the opportunity to reduce confrontation between East and West, in a world of conflict, is real while protecting ourselves against failure in the event that that hope proves illusory. This is a subject that I will address in my opening statement this morning.

Gorbachev's new thinking on foreign policy features at least three concepts which are strongly at odds with traditional Marxist-Leninist views. He says that a nation's security interest should be pursued through diplomacy, not through military threats and not through the use of military force.

He says that a nation's security cannot be guaranteed at the expense of the security of others; that security cannot be pursued unilaterally, it must be strengthened in cooperation with other states.

He stresses that international organizations and bilateral efforts can serve to solve regional and global problems.

The point that he returns to more than any other when discussing foreign policy is his belief that modern military technologies—both nuclear and conventional—have rendered war an inadmissible means of advancing a nation's political interests.

Western reactions to Gorbachev's proposals for changes in East-West political and military relations have, in my opinion, been skeptical, cautious, and unimaginative. Perhaps at this stage, only 48 months after Gorbachev came on the scene, that is to be expected.

For 40 years, our foreign policy and our defense programs have been shaped largely by one major force: fear of and opposition to the spread of Soviet-sponsored communism. It will require a leap of the imagination for us to conceive of our national goals in a world not dominated by the struggle between East and West.

So, before we can respond to Gorbachev, we need a vision of a world which would not be dominated by the conflict, indeed the enmity, that has been representative of United States-Soviet relations for 40 years.

As I said earlier, it would not be a world without conflict, conflict between disparate groups within nations, and conflict extending across national boundaries. Racial and ethnic differences will remain. Political revolutions will erupt as societies advance. Historical disputes over political boundaries will continue. And economic differentials among nations, as the technological revolution of the 21st century spreads unevenly across the globe, will increase.

So, in all of these respects, the world of the future will not be different from the world of the past. Conflicts within and between nations will not disappear.

But how different that world would be if the two superpowers could agree on two fundamental points. First: neither would seek to take advantage of such disputes to increase or extend their political or military power beyond their borders. Second: their bilateral relations would be conducted according to rules of conduct, which would preclude the use of force.

In such a world——

Senator BIDEN. Excuse me, but did you say "exclude" the use of force?

Mr. MCNAMARA. Which would preclude or exclude the use of force.

I apologize for my laryngitis this morning, Mr. Chairman.

In such a world, how would the nations of East and West, and North and South, relate to each other, and how might we move toward that world through a series of steps extending over a period of years.

I will try to answer those questions dealing very briefly, first, with the political actions, and, later, with changes in military forces.

I recognize that the division between military and political actions is artificial. I make it solely to facilitate discussion. In fact, the moves in one sphere will have a synergistic relationship to moves in the other, and, therefore, the two sets of actions should proceed concurrently.

I think it is clear that in the 21st century, regardless of actions by the Soviet Union and the United States, relations among nations will differ dramatically from those of the postwar decades. We have already seen the rise of Japan, and we must expect it to play a larger and larger role on the world scene, exercising greater political power and, hopefully, assuming greater political and economic responsibility.

The same can be said of Western Europe, which will take a giant step toward economic integration in 1992. From this is bound to follow greater political unity, which will greatly strengthen Europe's power in world politics.

By the middle of the century, several of the countries of what we now think of as the Third World will have so increased in economic power and size as to be major participants in decisions affecting relations among nations.

For example, India will have a population of 1.6 billion; Nigeria of 400 million; Brazil of 300 million. And if China achieves its economic objectives by the year 2000, and it is well on the way to doing so, if it then moves forward during succeeding decades at satisfactory, but not spectacular, growth rates, the income per capita of its 1.7 billion people midcentury will be equal to that of the British in 1965. Its total gross national product may well approximate that of the United States, Western Europe, or Japan, and will exceed that of the Soviet Union.

Now I recognize that these figures are highly speculative. But I point to them simply to emphasize the magnitude of the changes which lie ahead and the need now to adjust our goals, our policies, and our institutions to take account of them.

There clearly is need to develop a new relationship, both between East and West and between North and South. At a minimum, that relationship should accomplish four objectives.

First, it should guarantee the military neutrality of the Third World.

Second, it should commit the superpowers to sharp reductions in and ultimately termination of military support of conflicts between the Third World nations and conflicts between opposition political parties within those nations.

Third, it should assure support for a system of collective security and a mechanism for a resolution of regional conflicts without superpower involvement.

Finally, it should increase the flow of both technical and financial assistance to the developing countries, above present levels, to help them accelerate their rates of social and economic advance.

Agreement by East and West to support such a program would not only represent adjustment to the reality of economic and political change in the Third World, but it would be consistent with moves to dampen down, and ultimately terminate, the Cold War.

In fact, it would be a return to Roosevelt's and Churchill's conception of the postwar world, a conception which we all know was first formulated in the Atlantic Charter in 1941 and later expanded into a proposal for establishment of the U.N.

Both of these actions were uncontaminated by the ideology of the Cold War, which, of course, did not start until several years later.

While steps are being taken to reduce the danger of East-West political confrontation, the arms control negotiations now underway, as you emphasized, should be expanded in scope and accelerated in time. I can endorse fully all of the four points you made. I would go even further. I think we should establish both a short-term agenda and a long-term arms control agenda.

I would suggest that the short-term agenda should be negotiated by the mid-1990's. It should stress, as you emphasized, early completion of the START Treaty, rapid progress toward restructuring and balancing the conventional forces in Europe at substantially lower levels, and in association with the conventional force adjustments, very large reductions in tactical nuclear forces.

I want to draw your attention to what I know you have seen, General Goodpaster's recent suggestions. He proposes that we seek to achieve by the mid-1990's "a radical restructuring of the forces of NATO and Warsaw Pact on the basis of parity, with total active forces on each side at no more than 50 percent of NATO strength."

The short-term program, if achieved by the mid-1990's, will greatly improve crisis stability. However, after it is completed, NATO and the Warsaw Pact will retain thousands of nuclear warheads, and, therefore, a longer term program, which could be realized, perhaps, by the year 2000 should be developed. It should seek further reductions in nuclear forces.

For example, tactical nuclear weapons could ultimately be eliminated completely, and the strategic forces might be reduced to levels of somewhere between 500 and 1,000 warheads on each side.

If we adopted such short-term and long-term goals, and if we move successfully to accomplish them, the U.S. defense budget could be reduced substantially. Within 6 to 8 years, in my opinion,

it would be possible to cut military expenditures in half in relation to GNP; that is to say, from 6 percent at present, to roughly 3 percent.

Senator BIDEN. I'm sorry, and this is not you, but I did not hear clearly. Was that 6 to 8 years?

Mr. MCNAMARA. In 6 to 8 years, approximately——

Senator BIDEN. Thank you.

Mr. MCNAMARA [continuing]. We could cut the defense expenditures, as a percent of GNP, in half, from roughly 6 percent of GNP to 3 percent.

In 1989 dollars and in 1989 GNP, that would mean a reduction of about $150 billion per year, which could be divided between increased consumption, additional investment, and the alleviation of our present and very pressing economic and social problems.

I know that may be thought to be naive. But lest it be thought that a United States defense budget of 3 percent of GNP is a fantasy, we should remember that today, Japan's defense expenditures, in nominal terms, are 1 percent of GNP; Canada's 3 percent; and the average of all NATO nations, excluding the United States, 3 percent.

Now, many criticisms, quite significant and important could be directed at the program I have suggested. I am not going to take your time to go over them all in my introductory remarks. They are listed in the statement.

I do, however, wish to direct your attention to one, and that is that Gorbachev is likely to fail, and that if he fails, his successor will reverse his policy, placing a complacent West in a position of inferiority.

I think it is probably correct to say that the majority of United States-Soviet experts do believe Gorbachev will fail. As a matter of fact, Marshall Goldman, the associate director of the Russian Studies Center at Harvard University, said recently that, in his words, and I quote, "I think Gorbachev has about a year left."

Many Soviet citizens themselves are quite pessimistic about Gorbachev's situation. But, while noting the difficulties he faces, we should recognize that, at least in my opinion, he has diagnosed properly the basic problems facing his society. I do not believe there is any alternative to his political and economic reforms if long-term economic crises and resultant political disorders are to be avoided.

Therefore, if Gorbachev's efforts fail, and they may, his successor will face the same problems. To solve them, he will be required ultimately to introduce the same solutions.

There may be steps forward, there may be steps backward. The successor may conjure up foreign devils to consolidate domestic opinion. But over the next decade or two, it is likely the Soviet Union will move in the broad direction laid down by the General Secretary.

But suppose I am wrong. Can we protect ourselves against a collapse of perestroika, both nationally and internationally, and a resumption of both political conflict and military confrontation?

For those of us who are suggesting a new course, new thinking in U.S. foreign and defense policy, the burden of proof is on us to

answer that question. I believe the answer is clearly yes, we can protect ourselves against collapse of perestroika.

As nuclear arms agreements bring reductions in nuclear forces, and as they add to crisis stability—and they will—there need never be a weakening of our nuclear deterrent.

Concurrently with the changes in nuclear forces, it appears likely that through both unilateral actions and bilateral agreements, the present numerical superiority in the offensive capability of the Warsaw Pact conventional forces will be reduced.

In addition, there is a high probability that we can agree on confidence-building measures, which will greatly reduce the danger of surprise attack.

Together, these actions should give the West high confidence that we can move down a path which provides hope for terminating the Cold War, and that we can do so without accepting unacceptable risks in the event we fail to achieve that objective. That is what I urge we undertake, Mr. Chairman.

Thank you for the opportunity to present these brief opening remarks. I will be very happy to try to address your questions.

[The prepared statement of Mr. McNamara follows:]

PREPARED STATEMENT OF ROBERT S. McNAMARA

I. Introduction

Mr. Chairman, I am happy to appear before this Committee today to respond to your request for my views on the implications for the United States of recent changes in Soviet policies and behavior.

Put simply, I believe we face the greatest opportunity in forty years to shift the basis for the formulation of US foreign and defense policy from "Cold War" thinking to a new vision of superpower relations. By such a shift we may be able to enhance global stability, strengthen our own security, and at the same time produce significant long-term budgetary savings and the resources to support a much-needed restructuring of the US economy.

Before discussing the recent shifts in Soviet policy and how they may affect US policy, I should like to make two general comments with respect to security:

1. I believe the first responsibility of our President -- the first duty of government -- is the defense of this nation. And I believe that we can afford to spend whatever is necessary to maintain the military forces required to achieve that objective.

2. But I also believe our security depends on more than military force. It is a function as well of economic strength and social cohesion. Today our position in the world is adversely affected by:-

   a. Economic Weakness

      As a nation we have been on an enormous consumption binge, living beyond our means, selling our assets and borrowing heavily, both domestically and abroad, to finance unprecedented expansion of domestic spending. The rate of increase in our foreign and domestic debt is unsustainable.

   b. Unresolved and Mounting Social Problems

      While enjoying our consumption binge, we have permitted severe social problems to develop, problems which will plague our society in years to come. We are facing: destructive rates of illiteracy; unacceptably high levels of unemployment among blacks and teenagers; a rapidly growing "underclass" -- 51 percent of the births in the capital of the richest nation in the world, Washington, D.C., are illegitimate; high and rising rates rates of drug abuse and drug-related crime; a failure to adequately address the problems of the poor and disadvantaged; severe distortion in sectoral and regional growth patterns; and significant deterioration of our physical infrastructure.

      One of the great achievements of the American political and social system has been its ability to support political cohesiveness in

> a society as ethnically diverse as ours. This stability depends on preserving a reasonable degree of economic equity among the various social groups. Recent developments affecting minorities and the economically disadvantaged jeopardize the preservation of that equity.

In the face of these economic and social problems, it would be folly to spend more than we need for defense. I believe Gorbachev has presented us an opportunity to reduce the risk of military confrontation between East and West and, thereby, to lower the cost of maintaining our security in a world which will not be free of conflict. We should probe the extent to which that opportunity is real, while protecting ourselves against failure in the event it proves illusory. That is the subject I will address in this statement.

Let me begin by reviewing the changes Gorbachev has initiated and speculate on their causes and consequences.

II. Gorbachev's Changes in Soviet Foreign Policy: Their Causes and Objectives

Before Mikhail Gorbachev's appointment in March 1985 as General Secretary of the Communist Party of the Soviet Union, Moscow's view of national security appeared to assume that the USSR could guarantee its security only to the extent that other nations felt insecure. Soviet foreign and defense policy -- seemingly designed to heighten the insecurity of states on the Soviet periphery, the countries of Western Europe, and the United States -- was likened to a zero-sum game in which Moscow gained the security lost by others. Since 1985, however, Gorbachev has sought to redefine Soviet perceptions of national security by introducing his so-called "New Thinking" in Soviet foreign policy. The "New Thinking" on foreign policy features at least three concepts strongly at odds with traditional Marxist-Leninist calculations:

- A nation's security interests should be pursued through diplomacy not military threats or the use of force.

- One nation's security cannot be guaranteed at the expense of the security of others. Security cannot be pursued unilaterally; it must be strengthened in cooperation with other states.

- International organizations and bilateral efforts can serve to solve regional and global problems.

Gorbachev has consistently repeated each of these themes in a number of speeches, articles, and press conferences since 1985.

The point that Gorbachev returns to more than any other when discussing foreign policy is his belief that modern military technologies, specifically nuclear weapons, have rendered war an inadmissible means of advancing a nation's security interests. There is a lack of proportionality in nuclear war, according to Gorbachev: the destruction would far outweigh any conceivable political goal. Any war between the US and the Soviet Union contains within it the seeds of a possible unlimited nuclear war.

He has said, for example, "Our awareness of the realities of the present day world has led us to the recognition that it is no longer possible to settle international disputes by force of arms. We have arrived at a conclusion which is of historic importance: a nuclear war

cannot be won and must never be fought. One inexorable conclusion follows: There is no need for weapons [he is referring to the 50,000 nuclear warheads possessed by the US and USSR] which cannot be used without destroying ourselves and indeed all of mankind."

What is the origin of the "New Thinking?" Is it a passing phase?

I believe that two forces have led to the fundamental change in the Soviet's views of its relationship with the West.

The first is that country's economic crisis.

It is far more severe than many of us in the West recognized. The GNP growth rate, reported at approximately 6% per annum in the 1960's, 4% per annum in the 70's, and 2% per annum in the early-80's, has been stagnant for several years.

The effects of the stagnant economy have been reflected in basic measures of social welfare: life expectancy has fallen; infant mortality has risen; alcoholism has increased; and the Soviet press has reported that the quantity of food available to the average Soviet citizen is less today than under the Czars in 1915.

Gorbachev is aware of these conditions. In "Perestroika," he speaks of a society in crisis. He recognizes that it will be difficult, if not impossible, to finance the investment required to expand productivity and make the Soviet Union into a strong competitor in the global market in the twenty-first century, without reducing the inordinately high level of defense expenditures.

In contrast to the 5% of GNP which the US devotes to defense, the Soviets are spending a minimum of 17% and perhaps as much as 23% or 24%. They are an example of a Great Power -- as is implied in Paul Kennedy's book "The Rise and Fall of Great Powers" -- in which economic strength and security expenditures are out of balance. To strengthen the economy, defense outlays in relation to GNP must be reduced. But to do so, without reducing security, requires a reduction in the political conflict between East and West and a start on winding down the arms race.

That is the first factor influencing Gorbachev's program.

But there is a second factor as well.

At the same time that domestic economic problems are pushing Gorbachev to search for ways to reduce East-West conflict, he has come to recognize the increasing danger of military action in the nuclear age. The Soviets have studied the origin and implications of the confrontations over Berlin, Cuba, and the Middle-East. They have recognized, perhaps more than the Western world, the great danger that through misinformation, misjudgment, and miscalculation, such crises may escalate. Their sensitivity to such risks was evident at a meeting I attended in Moscow in January of this year.

The Soviet Government in association with Harvard University, invited McGeorge Bundy and Ted Sorensen, two close associates of President Kennedy, and me to join three Soviet officials (ex foreign minister Andrei Gromyko, former Ambassador to the U.S. Anatoliy Dobrynin and Fyodor Burlatsky, Khrushchev's personal assistant and now an advisor to Gorbachev; as well as three Cuban officials who are close associates of Fidel Castro (Messrs. Risket Valdes, Aragone Navarro and Del Valle Jimenez) to discuss the causes of the Cuban missile crisis and the lessons to be learned from that event.

In 1962, the Soviet Union, under the cloak of secrecy, and with the clear intent to deceive, had introduced intermediate-range nuclear missiles into Cuba. A series of actions followed which brought the US and the Soviet Union to the verge of military conflict and the world to the brink of nuclear disaster.

At the Moscow meeting, the Soviets stated with extraordinary candor that Khrushchev had acted in a spirit of adventurism and without consideration of the consequences. But, more fundamentally, Khrushchev did what he did, and Kennedy responded as he did, because each leader, their associates, and their peoples were captives of the gross misperceptions and deep-seated mistrust which underlay the Cold War -- misperceptions and mistrust that exist to this day.

In addition, it is now clear that the decisions of each side, before and during the crisis, were distorted as well by misinformation and miscalculation:

- Before the Soviet missiles were introduced into Cuba in the summer of 1962, the Soviets and Cubans believed the United States intended to invade the island to overthrow Castro and his government. But I can say, without qualification, we had no such intention.

- The U.S. believed the Soviets would not move nuclear warheads outside the Soviet Union. They did. In Moscow, we were told that by October 24, twenty Soviet warheads had been delivered to Cuba and their missiles were targeted on U.S. cities.

- The Soviets believed the missiles could be introduced secretly into Cuba, without detection, and when their presence was disclosed the U.S. would not respond. Here, too, they were in error.

- Finally, those who urged President Kennedy to destroy the missiles by a U.S. air attack, to be followed in all probability by a sea and land invasion, were almost certainly mistaken in their belief that the Soviets would not respond with military action. At the time the CIA had reported 10,000 Soviet troops in Cuba. We learned in Moscow that there were 40,000. We know now, too, that there were 270,000 well-armed Cuban troops. Both forces were determined, in the words of their commanders, to "fight to the death." The Cuban officials estimated they would have suffered 100,000 casualties. The Soviets expressed disbelief we would have thought that, in the face of such a catastrophic defeat, they would not have responded militarily somewhere in the world, most likely against U.S. Jupiter missiles in Turkey or NATO forces in Berlin.

By Saturday, October 27, 1962, the crisis had reached such a point that Burlatsky reported to us he and a Central Committee colleague decided to move their wives and children to the countryside in anticipation of a U.S. nuclear strike on Moscow. And, at the same time in Washington, on a beautiful Fall evening, as I left the President's office to return to the Pentagon, I thought I might never live to see another Saturday night. I know this sounds melodramatic, but it reflects the state of mind of the participants on both sides at that critical moment in the crisis.

What were the lessons learned?

We agreed there were two.

1. In this nuclear age crisis management is dangerous, difficult, uncertain. It is not possible to predict with confidence the consequences of military action between the Superpowers and their allies because of misjudgment, misinformation, miscalculation.

2. Therefore, we must direct our attention to crisis avoidance. And that means reducing political tensions between East and West and striking at the misperceptions and mistrust that feed such tensions.

In the twenty-six years that have passed since the Missile Crisis, we have made little progress in that direction. But I believe today we face an unparallelled opportunity to probe -- and I use the verb "probe" intentionally -- the extent to which major steps can be taken to shrink dramatically the basis for East-West conflict.

III. Western Responses to the Soviet Initiatives: Past and Prospective

Western reactions to Gorbachev's proposals for changes in East-West political and military relations have been skeptical and very cautious.

Perhaps at this stage, only 48 months after Gorbachev came on the scene, that is to be expected. For forty years US foreign policy and defense programs have been shaped largely by one major force: fear of, and opposition to, the spread of Soviet-sponsored communism. It will require a leap of the imagination for us to conceive of our national goals -- our role -- in a world not dominated by the struggle between East and West.

In the immediate post-war years, Americans viewed the world as composed of: a group of Western nations devastated by war; colonial nations in Africa and Asia straining for freedom; developing countries elsewhere struggling to advance; and all endangered by the two great Communist powers -- China and the Soviet Union -- whom we saw as determined to extend their hegemony across the globe.

In such a world the US viewed itself as: a generous benefactor of the poor; a source of aid to the nations seeking to recover from the war; the protector of freedom and democracy everywhere; and the defender of all against the Communist threat. Fearing that threat, the US: developed a massive military force; forged alliances with nations of both North and South; and supplied economic and military assistance to anti-communist regimes across the globe

The opposition between East and West has continued to dominate the world political scene. Neither national policies nor international institutions have yet adjusted to the possibility of a termination of the Cold War. And neither national nor international leaders have yet conceived of the shape of the world that would result, or of how to catalyze movement toward it. The world of today is still organized to reflect the rivalry -- indeed the enmity -- between the Socialist and Capitalist camps.

Before we can respond to Gorbachev, through adjustments in our foreign and defense policies, we need a vision of a world which would not be dominated by that enmity. It would not be a world without conflict, conflict between disparate groups within nations and conflict extending across national borders. Racial and ethnic differences will remain. Political revolutions will erupt as societies advance. Historical disputes over political boundaries will continue. Economic differentials among nations, as the technological revolution of the 21st Century spreads unevenly across the globe, will increase.

In those respects the world of the future will not be different from the world of the past-- conflicts within and between nations will not disappear. But how different that world would be if the Superpowers agreed on two points:

1. Neither would seek to take advantage of such disputes to increase or extend their political or military power beyond their borders;

2. Their bilateral relations would be conducted according to rules of conduct which precluded the use of force.

In such a world how would the nations of East and West and North and South relate to each other; how might we move toward that new world through a series of steps extending over a decade or more. I will try to answer those questions dealing first with political actions and later with changes in military forces. The division is artificial and I make it solely to facilitate discussion; in fact, the moves in one sphere will have a synergestic relationship to moves in the other. The two should proceed concurrently.

It is clear that in the 21st Century regardless of actions by the Soviet Union and the US, relations among nations will differ dramatically from those of the post-war decades. In the post-war years the US had the power -- and to a considerable degree we exercised it-- to shape the world as we chose. In the next century, whether or not the Cold War ends, that will not be possible. While remaining the world's strongest nation, we will live in a multi-polar world and our foreign policy and defense programs must be adjusted to that reality.

We have already seen the rise of Japan. We must expect it to play a larger and larger role on the world scene -- exercising greater political power and assuming greater political and economic responsibility. The same can be said of Western Europe, which will take a giant step toward economic integration in 1992. From that is bound to follow greater political unity which will strengthen Europe's power in world politics.

And by the middle of the next century several of the countries, of what we now think of as the Third World, will have so increased in size and economic power as to be major participants in decisions affecting relations among nations. India will have a population of 1.6 billion, Nigeria 400 million, and Brazil 300 million. If China achieves its economic goals for the year 2000, and it it then moves forward during the next fifty years at satisfactory but not spectacular growth rates, the income per capita of its 1.7 billion people in 2050 will be equal to that of the British in 1965. Its total Gross National product may well approximate that of the US, Western Europe, or Japan, and very likely will exceed that of the USSR. These figures are, of course, highly speculative. I point to them simply to emphasize the magnitude of the changes which lie ahead and the need to begin now to adjust our goals, our policies, and our institutions to take account of them.

In such a multi-polar world, neither the US nor the USSR would be able to so completely dominate their respective spheres as at present. Nor would the advantages outweigh the costs, even if it were possible. With or without changes in relations between East and West, the US must prepare to reposition itself, politically, for a new role in a new world -- a world which our children, living today, will not be able to avoid.

There, clearly, is need for developing a new relationship both between East and West and between "the North" and the Third World.

At a minimum, such a relationship should:

1. Guarantee the military neutrality of the Third World.

2. Commit the Superpowers to sharp reductions in, and ultimately termination of, military support of conflicts between Third World nations and conflicts between opposition political parties within those nations.

3. Assure support for a system of collective security for the nations of the South, and a mechanism for resolution of Regional Conflicts without Superpower involvement.

4. Increase the flow of both technical and financial assistance to the developing countries to help them accelerate their rates of social and economic advance.

Agreement by East and West to support such a program would not only represent adjustment to the reality of economic and political change in the Third World, but would be consistent with moves to dampen down and ultimately terminate the Cold War. It would be a return to Roosevelt's and Churchill's conception of the post-war world, a conception, which, when first formulated in the Atlantic Charter in 1941 and later expanded into a proposal for establishment of the UN, was uncontaminated by the ideology of the Cold War.

To move toward realization of Roosevelt's vision, should not East and West agree on a Code of Conduct to cover relations between themselves and between them and other nations? Such a Code could provide that:

1. Each Bloc's political interests will be pursued through diplomacy, not military threats or the use of force.

2. Consistent with 1, each Bloc's military forces will be restructured to defensive postures and reduced to a balance at substantially lower levels.

3. The Superpowers will not become involved in Regional Conflicts.

4. The nations of East and West, and in particular the Superpowers, will utilize international organizations to solve regional and global problems, including conflicts within and between Third World nations.

While steps are being taken to reduce the danger of East-West political conflict, the arms control negotiations now underway should be expanded in scope and accelerated in time.

The short-term agenda, to be negotiated by the mid 1990's, should stress: early completion of the START Treaty; rapid progress toward the restructuring and balancing of conventional forces in Europe at substantially lower levels; and, in association with the conventional force adjustments, large reductions in tactical nuclear forces. With reference to conventional arms, General Andrew Goodpaster, former Saceur, recently suggested we seek to achieve by 1995, a "radical restructuring of the forces of NATO and the Warsaw Pact, on the basis of parity, with total active forces in each side at no more than 50% of present NATO strength."[1]

---

[1] "Gorbachev and the Future of East-West Security: A Response for the Mid-Term" by Andrew J. Goodpaster, The Atlantic Council, April 1989.

The "short-term" program will greatly improve crisis stability. However, after it is completed, NATO and the Warsaw Pact will retain thousands of nuclear warheads. A "long-term" program, which could be realized perhaps by the year 2000, should therefore be developed to seek further reductions in nuclear forces, e.g.tactical nuclear weapons could be eliminated completely and strategic forces might be reduced to levels of approximately 500 to 1,000 warheads on each side.

If we adopted such short and long-term goals and if we moved successfully to accomplish them, the US defense budget could be reduced substantially. Within six to eight years it might well be possible to cut military expenditures in half in relation to GNP, i.e. to 3%. That would make available, in 1989 dollars and in relation to 1989 GNP, $150 billion per year which could be divided between increased consumption and the alleviation of our pressing economic and social problems. Lest it be thought a US defense budget of 3% of GNP is a fantasy, we should remember that today Japan's defense expenditures are 1% of GNP, Canada's 3%, and the average of all NATO nations', excluding the US, 3%.

IV. Potential Criticisms of a Program Which Has As Its Stated Objective Ending the Cold War

After forty years, an attempt to shift relationships between East and West, as dramatically as is implied by the program I have outlined -- a program to end the Cold War -- is by its very nature uncertain of accomplishment, potentially risky, and likely to be highly controversial.

Among the criticisms which might be directed against it are the following:

1. A respite in the Cold War will strengthen the Soviet Union and they will use their increased strength to weaken the West.

2. To date, with the exception of Gorbachev's December 7, 1988 proposal, there is little evidence of major changes in Soviet military deployments and no apparent shift in military doctrine.

3. Moves to terminate the Cold War will undermine support both in Europe and the US for defenses sufficient to provide security during the negotiating process.

4. There will always be conflicts of interest -- political, economic, military as well as ideological -- between nations and especially between Great Powers, which cannot be resolved by good will alone. Therefore, while the US should welcome and encourage any sign of liberalization in the Soviet Union, it should never confuse such changes with a Soviet abandonment of basic foreign policy aims. It is naive to think otherwise.

5. Past experience indicates the Soviets will not adhere to agreements to reduce political tensions or to limit arms. At times advantageous to them, they will attempt to "break out" of such agreements. Their ability to do so is greater than ours because of the nature of their political system.

6. Gorbachev is likely to fail. If he fails, his successor will reverse Gorbachev's policies, placing a complacent West in a position of inferiority.

Each of these criticisms is worthy of consideration, but each can be rebutted.

1. Were the Soviet Union to strengthen its domestic economy it might indeed direct that strength against the West. However, it will be years, perhaps even decades, before Perestroika begins to yield significant economic benefits. The reforms will bring huge disruptions of production and people. Gorbachev himself has said the reform process will take a generation. In the intervening period the relative economic strength of the West is bound to increase. Moreover, achievement of Perestroika will require that the USSR be integrated into global markets and international scientific exchanges.

   The integration process itself will contribute to a lowering of political tensions between East and West and will tend to make the changes irreversible.

2. It is correct to say that with the exception of Gorbachev's December 7, 1988 proposal, there has been little change in Soviet military doctrine or defense forces. The concepts Gorbachev has put forward ("reasonable sufficiency," "defensive posture," and "asymetrical reductions") are new to the East as well as to the West. While eminently sound, they are difficult to translate into particulars, so difficult that neither the US nor NATO has been able to respond to Gorbachev's general proposals with a bill of particulars as to how they should be implemented. Until we do so, criticism of his inaction is hardly justified.

3. Maintaining public support in the US and Europe for appropriate defense budgets will be difficult in any event. The requirement to reduce the US fiscal deficit will lead to proposals to cut defense expenditures in real terms. These pressures will, in turn, lead to suggestions that Europe and Japan shoulder a larger part of our common defense burden. This they are unlikely to do in any way that would permit a significant cut in the US defense budget. So public support for defense expenditures will erode. But I believe it will erode less rapidly if we appear to be trying to maintain a strong, stable defense posture as a foundation for moving in a constructive way to probe the degree to which we can reduce political tension between East and West.

4. Many historians will assert that Great Powers -- and regardless of the success of Perestroika, the Soviet Union will clearly remain a Great Power -- always have had and always will have an external enemy; they need such a target both to justify their military force and to maintain the power of the internal ruling class. History tends to support that judgment. But as I have pointed out, the world of the 21st Century will be different from that of any other period since the dawn of civilization. For the first time, no nation and no group of nations will be able to stand alone economically, technologically, environmentally, politically or militarily. Attempts by the Soviet Union to do so would not only endanger international peace and carry great risks for the USSR, but would be doomed to failure in the long run. Therefore, our objective should be to remain so secure as

to make an effort by any nation, to move away from inter-dependence toward domination, so costly as to be unattractive.

5. On the whole Soviet compliance with arms control agreements has been good. General Chain, now Commander of the Strategic Air Command, told Congress during the height of the debate over Soviet non-compliance with SALT that "If you take the body of the [arms control] treaties in a macrosense, they have complied with the large majority of the treaties." The one notable exception is the Krasnoyarsk radar which appears to be a clear violation of the ABM Treaty, probably as a result of bureaucratic bungling. However, our diplomatic protests over construction of the radar are beginning to bear fruit as the Soviets have stopped work on it and have offered to tear it down. In all cases of non-compliance, even if the military balance has not been affected, we should insist on strict adherence to the treaty and we should, and can, maintain the capability to initiate appropriate counter-measures if the response is not satisfactory.

6. It is probably correct to say that the majority of US Soviet experts believe Gorbachev will fail. Marshall Goldman, associate director of the Russian Research Center at Harvard, expressed this sentiment when he said recently: "I think Gorbachev has about a year left." At least some Soviet officials are also pessimistic. However, while noting the difficulties Gorbachev faces, we should recognize he has diagnosed properly the basic problems faced by his society. There is no alternative to his political and economic reforms if long-term economic crises and resultant political disorders are to be avoided. If Gorbachev's efforts fail -- and they may -- his successor will face the same problems. To solve them he will be required ultimately to introduce the same solution. There may be steps forward and steps back, but for the next decade or two, it is likely the Soviet Union will move in the broad direction laid down by the General Secretary.

In sum, there is justification for the potential criticisms of attempts to dampen down and ultimately to terminate the Cold War. Even under the best of circumstances the way will not be smooth and progress may indeed by slow and interrupted. Can we protect ourselves against an even less desirable outcome: a collapse of Perestroika -- both nationally and internationally -- and a resumption of political conflict and military confrontation.

I believe the answer is clearly Yes.

As nuclear arms agreements bring reductions in nuclear forces and add to crisis stability, there need never be a weakening of our nuclear deterrent. Concurrently with the changes in nuclear forces, it appears likely that, through both unilateral actions and bilateral agreements, the present numerical superiority and offensive capability of Warsaw Pact conventional forces will be reduced. In addition, there is a high probability that we can agree on Confidence Building Measures which will greatly reduce the danger to each side of surprise attack.

Together these actions should give the West high confidence that we can move down a path which provides hope for terminating the Cold War,

without incurring unacceptable risks in the event we fail to achieve that objective.

V. Conclusion

The Cold War between East and West with its continuing series of political crises, each one of which carried the risk of military escalation, has existed for forty years. It is inconceivable to me that we should be content to continue on that same path for another forty years. We in the West do have an opportunity -- the greatest since the end of World War II -- to formulate and seek to establish a new relationship. We can do so from a position of strength. If our hopes are not realized we will have lost nothing. If we succeed, we can enter the 21st Century with a far more stable political relationship between East and West, and with a totally different military strategy: one of mutual security instead of war-fighting; with vastly smaller nuclear forces, no more than one or two thousand, in place of fifty thousand; with conventional forces in balance at substantially lower levels and in defensive rather than offensive postures; and with a dramatically lower risk that our nation will be destroyed by unintended conflict.

With such a change in East-West relations, the long-term outlook for the United States will be brighter than at any time in the last half-century.

As a nation, we are in the forefront of the technological revolution. We have the largest common market in the world -- a union of fifty states, in effect a union of fifty nations. We possess a flexible, skilled labor force (albeit one which requires large investments in continuing education and training); strong capital markets; adventuresome entrepreneurs; and stable political institutions. With these strengths, the US is uniquely situated to move into the twenty-first century as the strongest of the nations in a multi-polar world in which there will be a far lower risk of war between the great power blocs.

It is true, as Paul Kennedy says, in the twenty-first century the relative power of the US will be less. But no nation will have greater power. And in absolute terms, we can be far stronger than today: economically, politically and psychologically. There need then be no divergence between our ideals -- our belief in representative government, individual liberty, economic and social advance for all peoples -- and our international behavior. If the US and its allies are bold -- if together we dare break out of the mind sets of the past four decades -- we can help shape international institutions, as well as relations among nations, in ways which will lead to a far more peaceful world and a far more prosperous world for the peoples of both East and West and North and South.

Senator BIDEN. Thank you, Mr. Secretary.

Senator Robb and I, I am sure, have a lot of questions, I must acknowledge at the outset. I ask the staff, even though there are only two of us here, to turn on the timer, just to remind me. You don't have to have it on when Senator Robb is speaking.

I have so many questions that I may trespass not only on your time but on the time of my colleague. So, I ask that the staff keep me to 15 minutes, if it will.

Mr. Secretary, I agree completely with your views regarding the objectives that you set out. There is a need for a new foreign policy. And I agree with your stated need to address the underlying causes of the conflict between the superpowers.

I was struck by the comment on page 6 of your statement, where you say: "Western reactions to Gorbachev's proposals for East-West political and military relations have been skeptical and very cautious."

When these hearings began several weeks ago, Ambassador Kennan made much the same point. Since then, we have seen Gorbachev continue to put forward initiatives, while the United States sat back.

Worse, we have placed ourselves, in my view, in the ridiculous position of seeming to fear negotiations on the question of nuclear forces in Europe. Then we act very surprised when Gorbachev puts forward another initiative. I, for one, do not understand at this moment why we are so surprised. As a matter of fact, we should be prepared to be surprised again, and very quickly.

In the next 4 or 5 months, I expect that we are going to see more surprises. We may even be surprised in the next couple of days, based upon what Gorbachev may or may not do in his present meeting with the Chinese leadership.

Now, Mr. Secretary, perhaps you could address the question of why the United States has been so cautious.

Why, for example, do you think the Bush administration seems more hesitant in dealing with the Soviet Union than President Reagan was?

Also, if you have had a chance to examine President Bush's speech on Friday, I'd like to know what your reaction is. Did the speech contain, in your view, a vision, a realistic vision, or did it really spell out a standpat policy or, as some have began to call it, a "status quo-plus" policy?

Specifically, would you discuss the significance of the statement in the speech that our goal is to integrate the Soviet Union into the community of nations. How would that compare with the conception of Roosevelt and Churchill that you have spelled out in your statement.

So, would you give us your guess, if you are willing, as to why they are so cautious. Is this really a standpat-plus, a status quo-plus policy? Do you think there is a vision that the administration has spelled out?

Mr. MCNAMARA. Mr. Chairman, your first question is, Why have we been so cautious?

I think it is relatively easy to answer that, and I say this as one who has been affected by what I am about to say in my answer.

I think for 40 years we have had a mindset, a mindset that has been shaped by the fear of Soviet aggression. I think at times we have been paranoid. I am not speaking of the Reagan administration, now. I am speaking of much of 40 years. To call Nicaragua a security risk to this country is absurd, in my opinion. But it is very easy to understand.

I want you to understand that I am not absolving myself of actions that have been shaped by this mindset. There was U.S. action in the Bay of Pigs. I was part of the administration that was in power when the Bay of Pigs operation took place. I want to tell you that it was a function of paranoia.

It is understandable how that paranoia developed when you examine the Soviet actions.

But I simply want to say to you that I believe our people have been and are today addressing the world's problems, viewing the world's problems, through eyeglasses and mindsets that have been affected by that paranoia.

It is not going to change quickly, and that I think is the answer to your question. That is why we have been cautious.

Now I am not suggesting that we should throw caution to the winds. Do not misunderstand me.

What I have said to you is that I believe we should throw that mindset out, we should examine what Gorbachev is saying, we should address the question of why is he saying it.

I submit to you that he is saying it because he has almost no alternative. He faces a crisis inside the Soviet Union, which, if it is to be addressed successfully, requires that he shift defense resources to his domestic economy. If he is to do that without reducing the security of his nation, he must reduce the conflict with the West.

That is one factor driving him.

The second factor driving him is that he is beginning to understand the risk to his society, and to ours, of another 40 years of this confrontation. On numerous occasions, it has brought us to the verge of military conflict which, in the nuclear age, carries the risk of destruction of our society.

Those are the forces driving him.

Now, he may fail and be forced out. His successor may revert to the aggressive policies of the past 40 years. And if we move imaginatively to respond to Gorbachev's proposals, we must protect ourselves against the risk that you see and I see and my critics see.

Now, to go to your second question, Bush's speech, it has some very good points in it. Let me read just one.

He says:

> Our review indicates that 40 years of perseverance has brought us a precious opportunity.

So, he is recognizing an opportunity for change. I think that is the first step toward change. The next sentence says:

> Now is the time to move beyond containment to a new policy for the 1990's.

I could not agree more.

The problem is the speech does not outline the new policy. It has not yet been formulated. He has only been there for 110 days, so perhaps it is understandable. But we must formulate it. It is in our interest to do so, while at the same time protecting ourselves, as I suggest, in the event the policy fails.

Now, finally with reference to his statement that our goals should be to integrate the Soviet Union in the family of nations, I basically agree. It may be presumptuous for us to say we will integrate them in the family of nations, but I do agree that it is an opportunity to move toward the Roosevelt-Churchillian view of the postwar world. In their view, no single power in the postwar world would act unilaterally.

Roosevelt and Churchill proposed the development of a system of collective security. Through that system, the great powers of the postwar world would act collectively, not unilaterally, to deal with problems in other nations and among other nations.

I think that is, in a sense, consistent with the sentence you referred to, that our goal is to integrate the Soviet Union into the family of nations.

Senator BIDEN. Let me follow up on two points.

One is this concern that has been clearly expressed, not only by a number of Sovietologists, but by some in the administration, that Gorbachev is going to fail. You mentioned two potential responses to that concern. Let me suggest a third and ask for your opinion, and maybe it is implicit in what you have already stated.

Particularly in the area of arms control, can we not build into our negotiations, a set of circumstances that, even if there were a drastic turnaround in Soviet policy—for example, abrogation of treaties negotiated by Gorbachev—even if that occurred the Soviets would be in no better position than us to quickly reconstitute the threatening force that, hopefully, we had negotiated away?

In other words, is it not possible to negotiate, even if you assume that Gorbachev will fail and a successor will come along who will not agree with what he had negotiated, a set of circumstances that makes it no more feasible for the Soviet Union to return to unprecedented levels or previous levels of threatening capability, than it would be for us to return to that level in response to their action?

Is that a logical position to take, and is it feasible that that could be part of the negotiating posture?

Mr. MCNAMARA. Mr. Chairman, the answer to your question is unqualified "Yes." but I think it is absolutely essential that as we move, either unilaterally or bilaterally, toward arms reduction, we do so in ways such that if Gorbachev or his successor reverses his policies, if the treaties are abrogated, we will be not weaker, but stronger than we are at present, in our relative position vis-a-vis the Warsaw Pact and the Soviet Union.

In my statement, I tried to expand on that thought, and I strongly agree with the implication of your question. Not only can we do that, we must do that.

Let me just take 30 seconds to suggest why I feel so strongly that it is possible and necessary.

It is possible because in the process of arms negotiations, or responding to his unilateral actions, the numerical superiority in both the Warsaw Pact conventional forces and their tactical nuclear forces will be reduced. I have absolutely no doubt about that whatsoever. That is the objective.

He said he will move to asymmetrical reductions. That will ensure that the existing numerical superiority is reduced. This will strengthen our security and put us in a better position, even if his successor reverses the course.

Second, while we are negotiating arms reductions, we should also negotiate conditions of greater stability. This means reducing the danger of surprise attack.

One of the proposals that President Bush made in the speech you referred to was that we endorse President Eisenhower's Open Skies proposal. Some have ridiculed that proposal because it is said that when Eisenhower put it forward, there were no "spy" satellites, and, therefore, open skies for surveillance aircraft meant something quite different than it does today.

But, it would be possible to introduce aircraft surveillance of the potential zone of conflict in Western Europe, to give us both more precise information about military force deployments, and also more accurate and timely information on Soviet troop movements and troop reinforcements. This would reduce the danger of surprise attack.

Senator BIDEN. Mr. Secretary, I suspect, at least having been one of those who made reference to the Open Skies proposal when asked to comment on the speech, I suspect that the ridicule to which you referred—and I don't believe that is what I did and you were not referring to me.

Mr. MCNAMARA. Oh, no, I certainly was not.

Senator BIDEN. I know that. But there has been some ridicule.

Mr. MCNAMARA. Yes.

Senator BIDEN. I suspect it relates less to the value of such a proposal than to the expectation that flowed from the beginning of the speech. When the President said "I am setting out a vision, a bolder vision than any of my predecessors ever had or could have had," I think all of us sat there, Americans and Europeans, waiting for something profound to be stated. We maybe unfairly expected that something profound would come forward.

When this proposal, meritorious, in my view, came forward, it seemed to me the reason why it resulted in some ridicule is it came so far from meeting the expectations that were built up in the beginning of the speech.

So, I don't think that most of us think that the Open Skies proposal would not be extremely valuable. It could be a very valuable tool. But I suspect reason for the ridicule came from an "is that all there is" idea. It's like the song Peggy Lee used to sing, "Is that all there is?" I think that is more of what it was. But I may be wrong.

Mr. MCNAMARA. If I may interject one moment on my time and not yours, Senator——

Senator BIDEN. Yes, sure.

Mr. MCNAMARA. I just want to say that I think a bold vision has not yet been put forward by the leaders of our country. It is time that we do so.

I think the hearings in this committee will contribute immensely to that.

Senator BIDEN. I would like to come back to a second round. I don't want to start my next question because it would follow on to two or three additional questions. So, I will yield.

But let me yield by saying that I read with great interest at the time you delivered your speech—I believe it was to the National Press Club in December. I am not sure it was the Press Club. Maybe it was the Arms Control Association. At any rate, you delivered a speech, which was later published in December of this past year.

I think you put your finger on a number of things, one of which is incredibly important, and, hopefully, these hearings will help generate it, and that is the need for the formulation of a bipartisan foreign policy.

Mr. MCNAMARA. Absolutely.

Senator BIDEN. The purpose of these hearings, at least on the part of this Senator, and I suspect all of us, is that, hopefully, they

will generate—at a time when everyone acknowledges the need for a new vision—a different set of proposals designed to secure the United States in a world that has changed. As the Irish poet, William Butler Yeats said, speaking of Ireland in 1916, I think the poem was called "Easter 1916," he said, "The world is changed. It is changed utterly. A terrible beauty has been born."

Well, that's about where we are now. He could be saying that right now about the world.

So, I hope that both the administration and anyone else, Republicans and Democrats alike, don't assume that, as we move through this, the objective is to be critical at a time we acknowledge the President has a great opportunity and a great burden. This is because few of us come equipped with great vision. And what is required now is a vision, which has to be etched, if you will, for the next generation. The purpose of these hearings is to help promote and assist the President in that, in a bipartisan way.

But let me yield now, and I will come back to my second set of questions shortly.

I yield to my colleague from Virginia, Senator Robb.

I say to the staff that you need not time him.

Senator ROBB. Mr. Chairman, you need not worry about time. I'm afraid that I have another commitment and I'm not going to be able to remain for the entire hearing.

But I appreciate that.

Mr. Secretary, it is good to have you back.

Mr. MCNAMARA. It's nice to see you, sir.

Senator ROBB. I am very pleased to have you actively participating in the debate about the shaping of defense and foreign policy in this country today, and your more active involvement in recent months is indeed welcome.

I am curious because of the shortness of time, and I don't like to attempt to simplify all of the nuances that are very much a part of the discussion that you and the chairman have already had this morning. But given the shortness of my time this morning, I would put a couple of other pieces on the table, since you seem to be very willing to take on virtually anything in the foreign policy or defense policy arena today.

You alluded a moment ago in your statement to the SNF situation and the conventional situation.

I was wondering if you could speculate a little for us as to either the likelihood or the advisability of a particular set of developments on either score and how, in your judgment, those might be tied together today. I am thinking specifically if a proposal were made by the General Secretary, or perhaps even President Bush, again, fleshing out this vision thing, and perhaps putting something more dramatic on the table, that would lead to something as dramatic as zero-zero in conventional, or the prospect of something equating zero-zero on both sides of that equation.

Is there any real likelihood, in your judgment, that the forces that are at play in both the Soviet Union and the world, the court of world opinion, if you will, and in the United States, that we are going to have dramatic developments in those? Also, I guess the more important is should we be aiming for specific objectives that

are radically different than the status quo in those two areas and in the theater weapons?

Mr. MCNAMARA. If I understand your question, Senator Robb, it refers to both conventional and nuclear forces, and therefore I will address both.

Senator ROBB. I am taking advantage of a relatively short time to put a couple of major pieces together that I realize are not necessarily interrelated.

Mr. MCNAMARA. Well, I very much believe that we should be looking toward dramatic changes. The forces on both sides are excessive. Moreover, they are shaped and structured in such ways that at times of political tension, there is great danger of instability; that is, the temptation to initiate a preemptive attack.

We saw this particularly during the Cuban missile crisis. We have seen it at times of crisis in the Middle East. We should move to both lower the levels of force and also to restructure them, so that they are more stable in periods of potential political confrontation.

I think that is entirely possible.

It would result in dramatic changes, to use your terms. As a matter of fact, the proposals that Gorbachev, I understand, gave to Secretary Baker in Moscow last week are, in themselves, dramatic. We should examine those very, very carefully.

If I understand them correctly—and I am speaking now only from what I have read in the newspaper—Gorbachev proposed reductions of about 66 percent in the Warsaw Pact tanks; 60 percent in their combat vehicles; and 66 percent in their artillery, for example.

These are tremendous reductions.

I very much support them. I think they are entirely consistent with advancing the security of the West.

In association with that, I would also urge that we consider dramatic reductions in the tactical nuclear forces.

Now, here we have both a military problem and a political problem. They are so interrelated that it is very difficult to disentangle them. I don't want to presume to do so.

But I do want to say that German military and political leaders for years have been stating their opposition to the present nuclear force deployment in Europe and to the present NATO nuclear strategy.

Helmut Schmidt, the former Chancellor and former Defense Minister, who no one will ever accuse of being soft on communism, stated, and I quote: "Flexible response," which is NATO's current strategy, "is nonsense. It is not out of date, but nonsense, because it puts at risk the lives of 60 million Germans, 15 million Dutch, and I don't know how many million Belgians and others, who live on continental soil. I can assure you," he says, "that after the use of nuclear weapons on German soil, the war would be over as far as Germans go."

Gen. Johannes Steinhoff, one of the greatest of the German generals, a former Luftwaffe chief of staff, stated, and I quote: "I am firmly opposed to the tactical use of nuclear weapons on German soil."

What they are both saying is that it makes no military sense to launch NATO nuclear weapons from German soil against German soil. And yet, that is basically the current NATO strategy.

I can well understand that as the German people become more and more aware of this strategy—and only now are they beginning to do so—they are going to oppose it. That is what underlies their present position.

A deterrent must be capable of striking at the heart of the opponent. The deterrent to Soviet aggression in Western Europe today is the ability of NATO to strike at the Soviet Union itself not the ability to strike with tactical nuclear forces at targets in East Germany.

In sum I believe the West could and should put forward dramatic proposals for the restructuring of both conventional forces and tactical nuclear forces.

Senator ROBB. Mr. Secretary, is it possible that you could conceive of a situation where we would actually go to zero-zero in either of those areas?

Mr. MCNAMARA. It is inconceivable that we would go to zero-zero in conventional forces in my lifetime.

Senator ROBB. When I say "zero," I am talking about Soviet and not Warsaw Pact forces.

Mr. MCNAMARA. I realize that.

Senator ROBB. About a total withdrawal of Soviet and United States forces if such a proposal were to come down the line.

Mr. MCNAMARA. I guess the short answer is "No" because, in my opinion, the Soviets feel the need for some forces in Eastern Europe for years and years to come.

I see a possibility of a substantial reduction of U.S. forces in Europe, but only after we have: (*a*) negotiated a balance of NATO-Warsaw pact conventional forces; (*b*) moved far in that direction; (*c*) accompanied that action balance with further moves to reduce the danger of surprise attack; (*d*) verify conformance with the negotiated agreements.

Now, with respect to zero-zero in tactical nuclear forces, as I indicated in my prepared statement, I do support elimination of all such forces as a long-term objective. Such an objective could perhaps be achieved by the year 2000. But that could occur only after we have realized a conventional force balance between Warsaw Pact and NATO forces at much lower levels than exist today.

Senator ROBB. Mr. Secretary, you made a suggestion that we could reduce our total defense expenditures as a percent of GNP from 6 to 3 percent at some point, which is a fairly dramatic reduction.

Mr. MCNAMARA. Yes, sir.

Senator ROBB. Would that be contingent upon very substantial progress in these two areas, as well as something close to the 50-percent reduction in the START negotiations or whatever the case might be?

Mr. MCNAMARA. It would indeed be contingent on that, Senator Robb; and, not only on that, but contingent also on other actions which I outlined in my statement. In particular, the United States and U.S.S.R. would have to agree to reduce the likelihood of superpower involvement in regional conflicts. If that were done, we

could reduce substantially certain of our naval forces that are directed primarily to intervention in regional conflicts.

Senator ROBB. I would have to observe that I think your suggestion that there are other pressing needs is a currently widely held view in the United States in terms of general priorities, and I suspect there will be continued pressure in that direction.

Let me just try one other topic, as long as we have you here and you seem so willing to take on almost anything that we put on the table or that others do.

Let's take a look at the Sino-Soviet meeting that is taking place today.

I would remind our able chairman, if he is within hearing, that I am about to finish shortly.

On the meeting that is taking place today in the People's Republic of China between the leaders of those two countries, what do you anticipate may emerge or result from those meetings that will be significant, either in their bilateral relationships, or, more importantly for the United States, that will have a significant effect on United States policy toward either of those major Communist powers?

Mr. MCNAMARA. I believe this will be but the first move of the Soviets toward realignment of their relationships, not only with China, but with other nations in the Far East. That would certainly include Japan.

I would be amazed if the meetings in China are not followed by some actions relating to Japan that will lead to a reduction in tension between the Soviet Union and Japan.

The meetings in Beijing will almost surely result in a reduction of tension between the Soviets and the Chinese, an increase in economic relationships between them, a move toward more normal political relationships between them.

Some may think that is adverse to our interest, that conflict between the Chinese and the Soviets is to our advantage. I do not see it that way.

I think that a reduction in tensions between the U.S.S.R. and China would be a move toward what President Bush referred to in his speech: the integration of the Soviet Union into the world, a world in which there would be codes of conduct covering the behavior of the great powers in dealing with problems in other nations.

The discussions of today, tomorrow, and the next day in China are but the first step in that direction.

Senator ROBB. Do you expect any significant linkage between whatever particularly General Secretary Gorbachev will say in his Vladivostok speech in terms of their intentions in that part of the world?

Mr. MCNAMARA. I suspect so. I don't want to predict what will be said. And I don't want to predict either what the Soviets will do with respect to Japan. But I do not think we should be surprised, and we should begin to take account of the possibility that they will move to reduce the conflict with Japan, as they are doing with China.

Senator ROBB. Including a resolution of the Northern Islands?

Mr. MCNAMARA. I believe that within a reasonable time, we'll see a resolution of the problem with the Northern Islands. Without

that, there can be no fundamental change in the relationship between Japan and the Soviet Union.

I think the Soviets understand that, and therefore I think we should expect them to move on the Northern Islands.

Senator ROBB. Mr. Secretary, I thank you for sticking your neck out in a variety of different areas and for sharing your time with us this morning. I am grateful.

Mr. Chairman, I thank you. I will have to review the remainder of the testimony. But thank you for having Secretary McNamara as a witness.

Mr. MCNAMARA. Senator Robb, it is a great pleasure to be with you, sir.

Senator BIDEN. Thank you, Senator Robb.

As I said, I have tons of questions, but I am only going to ask a few more because we don't want to either keep you the whole day or deny ourselves the opportunity to hear from the other witnesses.

Mr. Secretary, do you think that Secretary Gorbachev will indeed suspend the INF Treaty if the West were to build the LANCE follow-on? Isn't that a hollow threat? Wouldn't it undermine the goodwill that Gorbachev has been attempting to generate so severely that he wouldn't do it?

What is your view? Do you think it is a genuine threat?

Mr. MCNAMARA. Mr. Chairman, I think he made a tactical error, a political mistake, in even suggesting that he would suspend the INF Treaty.

There is a commonly held belief in the United States that the Soviet Union abrogates treaties. I think their record is reasonably good in adherence to treaties. But the kind of statement that the Soviets have made with respect to possible abrogation of the INF Treaty is, I think, simply adding fuel to that fire. It was a serious political blunder in my opinion.

That's No. 1.

No. 2, I don't believe they will abrogate the treaty.

No. 3, what he failed to make clear was that the abrogation he was talking about related to the modernization of the LANCE. We should expect that if we modernize the LANCE, they will obtain or retain a weapon with similar capabilities.

The LANCE modernization will put it exactly on the margin of the INF Treaty, just below the treaty limit. What Gorbachev should have said——

Senator BIDEN. For the record, the treaty limit relating to distance that such a missile can travel.

Mr. MCNAMARA. That's right, to the limit of roughly 310 miles.

Our LANCE modernization would put our weapon just barely under that 310-mile limit. What Gorbachev or his spokesmen were implying was that they would introduce a modernized weapon to compete with the modernized LANCE which would be about that same limit, but perhaps over because they have a weapon that has a range somewhat over 310 miles.

In any event, I think they blundered politically, and I do not believe they will respond militarily with an action that would abrogate the treaty.

Senator BIDEN. As you know, or as you at least surmise from my opening statement, I believe that there is a natural linkage between strategic arms control and the future of the ABM Treaty.

I think without a secure ABM Treaty, START will not be completed, nor, frankly, should it be.

I also think there is a natural linkage between short-range nuclear weapons and conventional forces in Europe, a linkage, I might add, that was established back in the early 1950's.

But we should tie reductions in nuclear forces, in short-range nuclear forces, to the conventional balance.

These two linkages seem, to me, to be logical and justified. But some others are suggesting an additional linkage, a linkage between strategic weapons and conventional arms cuts.

I understand that General Abrahamson, the former director of the SDI Program, has said that SDI must be continued and deployed in order that we might improve our chances of getting a conventional arms treaty.

How do you regard these two additional linkages, the linkage between SDI, the need to deploy it in order to get conventional reductions, and do you agree with the other two linkages, the ones that I believe should exist, between ABM and strategic talks, and SNF and conventional talks?

Mr. MCNAMARA. Mr. Chairman, this is a complex question. Let me try to address it carefully and fully.

First, I don't believe the Joint Chiefs of Staff will or should ever agree to a limit such as that proposed in START on offensive nuclear arms if the Soviets are to be permitted unlimited deployment of an antiballistic missile defense system.

If we insist on and actually do deploy an SDI of the kind that General Abrahamson was contemplating, a system that would have a substantial defensive capability, and not only a substantial defensive capability, but a capability that would be very difficult for the Soviets to estimate and predict in advance with any degree of accuracy, we must assume and recognize that that abrogates the ABM Treaty. The Soviets will then be free to deploy whatever defensive system they wish to.

Now, in the face of that freedom, I submit to you that, as Secretary of Defense, I would not have agreed to a limit on offensive arms. I do not believe the Joint Chiefs will ever agree to a limit on offensive strategic nuclear arms in the face of an unlimited Soviet defensive potential. That is the first point.

Second, as to linkage between the SDI deployment and an agreement on conventional forces, there is no military purpose to be served by establishing that linkage.

The Soviets have put forward proposals to eliminate the asymmetries that currently exist, the numerical asymmetries in conventional arms. There is no reason to believe that they will not move in that direction if we put forward reasonable counterproposals.

The negotiations are going to be very complex, not because we lack deployment of an SDI, but because there are qualitative differences and other asymmetries in the force structures requirements of the two parties; geographical differences, reinforcement differences, weapons system differences; et cetera. It will take years to arrive at agreed limits on conventional arms through negotiations.

I hope, by the way, that we can move in that direction through unilateral actions while we are negotiating the treaties. But I see no basis for believing there is or should be a linkage between SDI deployment and conventional force reductions.

Finally, let me address the linkage between the tactical nuclear forces and the conventional forces. I believe that most military leaders and most political leaders in the West would state there is a very clear linkage at some point between reductions in tactical nuclear forces and reductions in conventional forces. I do not believe that NATO will ever go to zero-zero on tactical nuclear forces unless there has been very substantial progress toward moving to parity, at substantially lower levels, in conventional forces. That is the linkage.

Senator BIDEN. Thank you, Mr. Secretary.

I have three additional questions, but one is very long, and two, although shorter, are significant enough to require possibly a longer answer.

So, with your permission, I would like to submit them to you in writing.

One relates to your notion of minimum deterrence. The second one relates to what I think is an underlying concern many American strategists have about a united more independent Europe. My view is there is an underlying concern that no one ever talks about that, again, what we said we wanted is working, and now that it is beginning to work, I believe some are not sure we want it.

I would like to ask you a question about that.

Also there is a question relating to Gorbachev's stated assertion that he is seeking only a defensive, and not an offensive, capability in Europe.

With your permission, I would like to submit them in writing.

Mr. MCNAMARA. Surely.

Senator BIDEN. I know that you are an incredibly busy man and there is no hurry on the answer. But if you could, I would appreciate a response on those three questions, if you are willing.

Mr. MCNAMARA. Very well, Mr. Chairman.

[Because Mr. McNamara was traveling at the time this testimony went to press, it was not possible to incorporate his answers to the chairman's questions in this printing of the hearing.]

Senator BIDEN. Thank you very, very much. You have added a great deal to the hearing already. We appreciate your always being willing to come and testify before not only this committee, but other committees, to lend us the benefit of your experience and insight. Thank you.

Mr. MCNAMARA. Thank you, Mr. Chairman. It was a pleasure to be with you.

Senator BIDEN. Thank you very much.

OUr next panel of distinguished witnesses is made up of Dr. Edward L. Warner III, a senior defense analyst at the RAND Corp. in Washington, DC; Dr. F. Stephen Larrabee, vice president and director of Studies at the Institute for East-West Security Studies in New York, NY; and Dr. Barry Blechman, president of Defense Forecasts, Inc., in Washington, DC.

Gentlemen, thank you for your patience.

I will also indicate for those who would like to know that there will be one more panel after this, made up of two witnesses, and that will be the entirety of our witness list this morning.

Let me again welcome you all, thank you for your willingness to be here, and if we could have your opening statements, if you will, in the order that you were called—Dr. Warner, Dr. Larrabee, and Dr. Blechman—I think that would be the most appropriate way to proceed.

Then, after you all have finished, we will have questions.

Dr. Warner, welcome.

STATEMENT OF EDWARD L. WARNER III, SENIOR DEFENSE ANALYST, RAND CORP., WASHINGTON, DC

Mr. WARNER. Thank you, Mr. Chairman.

I, too, appreciate the opportunity to come and speak to you this morning about these subjects, particularly the arms control challenges facing the Bush administration and the West.

I have a statement, an opening statement for the record. I would like to try to summarize it in light of the relative short time in trying to get through all of us.

First of all, I think as we look at arms control, we ought to talk a bit about the objectives that we are trying to meet in arms control. By way of introduction, I do believe we face both a challenge and an opportunity in the new policies of the Soviet Union and the new atmosphere of the world environment as it is now evolving.

It is clearly the case that we have an opportunity to move forward in the reduction of armaments in ways that have not been present in the past several decades.

As far as those objectives are concerned, I think in both nuclear and conventional forces, our primary objectives, as you also stated earlier, have to do with stability. Yet we often lack clarity in what we mean by "strategic stability."

I would submit that strategic stability has three central components. One of those is political stability. It is recognizing that the conclusion and compliance with arms reduction agreements, arms control agreements, tends to foster an atmosphere between Moscow and Washington, and, more broadly, in East-West relations that can facilitate our cooperation in many other areas as well.

The second stability is arms race stability; that is, we seek to moderate the pace, the scope, the character of the arms competition between our adversary nations and our opposing alliances.

Clearly, arms control agreements can shape and make more predictable and lessen the pace at which the two sides introduce new weapon systems and have them understand the attentions of one another.

Finally, the most important of the stabilities is the one often called "crisis stability," or, more recently by some of my colleagues and I, at least, "first-strike stability," when we talk about the interrelationship of nuclear forces.

In this case, we seek to attain a position in which neither side has any incentive to initiative nuclear aggression against the other or, for that matter, large scale conventional aggression, because both sides have, in the jargon of the trade, secure second-strike re-

taliatory capabilities in which both, then, are threatened with comprehensive devastation of things they value most.

In the conventional area, we are searching for in greater detail an analogous concept. But what we are really looking for there, again, is a balance of conventional forces where neither side can really have the prospect of meaningful victory.

These, then, are the objectives that we have. Let me spend a few minutes now talking about basically START, the reduction of strategic offensive armaments, and the prospects and objectives we ought to have on conventional reductions in Europe.

When we look at START in particular, the main choice that the Bush administration faces is this question of should it try to proceed to complete the START agreement along generally the lines established and agreed between the Reagan administration and Mr. Gorbachev and company, or should it introduce some new additions, some new additions that most certainly will be designed to advance causes of stability and the like. But, inevitably, if you add new elements to the treaty, you will run the risk of delaying completion or possibly forfeiting completion altogether.

This does not mean that there can't be some additions that might be wise, useful addendums to the currently agreed framework. But we ought to address those carefully.

Let me just note a few that have already begun to surface in the press and, by all indications, are being considered within the administration.

The first of these is a ban on all heavy or SS–18 class missiles.

The Soviets have had a unilateral right to such missiles since the conclusion of the SALT I agreement in 1972, and it has been a primary goal of successive administrations to try to reduce that unilateral advantage.

The currently agreed START framework has the Soviets, we understand, agreeing to cut that number, 308 SS–18's, in half. Some are now proposing that we ought to finish off, if you will, the last 154 within these reductions.

Even the reduction of just one-half of those, let alone all of those heavy missiles, is very useful to the United States in meeting that objective of first-strike stability, for the lion's share of Soviet ballistic missile throw-weight's any single system lies within those heavy missiles. A reduction in that throw-weight reduces the potential for breakout in the number of total weapons and it reduces the potential for barrage attacks against mobile missiles or against bombers trying to escape from their bases.

So, I thoroughly support the idea that we should reduce the SS–18 force. I think it is a major accomplishment of the agreed framework to cut it in half.

I think, however, we should look carefully at trying to go that second half, unless we are prepared for some concessions from our side toward the Soviets, and it is not clear to me what those might be.

A second proposal has been a ban on the deployment of mobile intercontinental ballistic missiles, or ICBM's, carrying multiple warheads, or MIRV's.

The problem here I think is quite simple. Both sides now have alternatives for deploying mobile ICBM's, in particularly in a rail-

road garrison mode, as we are calling it. The Soviets, of course, have already proceeded with the SS–24, and they have deployed 10 to 20 of these missiles onboard trains. We, of course, have a controversial set—it's always a controversial set—of arrangements that we are proposing about ICBM modernization, including putting the MX on rails.

The problem with this one is that it is unlikely to provide us relief in the way that we may seek it.

If we ban a mobile configuration, we are, in fact, moving in precisely the wrong direction because, in order to increase first-strike stability with the START agreement, we should try to reduce the attack capacity of both sides as it can be directed against the other side's nuclear forces, and we should try to permit and even encourage survivable basing configurations for retaliatory forces.

Getting rid of a mobile option, even parts of a mobile option, tends to work in the wrong direction on that second criterion.

Moreover, the chances are that if we keep these missiles off the rails, we will merely consign them to silos. The MX is already in silos. The proposal is to take it out of silos and put it on the rail, where it would be more survivable, at least once dispersed.

The Soviets are putting SS–24's both in silos and on the rail. If we merely make the option to purely put them in silos, we will not have cut attack capacity, goal one, but we will have hampered the search for better survivability for the land-based ICBM element in our strategic nuclear forces.

Finally, there is beginning to be an idea booted about on cutting out or limiting the number of MIRVed warheads, that is, multiple warheads, and the overall number of ballistic missile warheads that are permitted on both sides.

The agreed framework would permit 4,900 ballistic missile warheads by each side. This idea would have something to do with trying to limit the number of these on multiple missiles.

MIRV's on fixed, land-based ICBM's do tend to be more destabilizing once each side has the capability to destroy fixed silos. MIRV's on mobile missiles, whether mobile land missiles or mobile missiles at sea, are less clearly destabilizing.

I think we have a tendency to stigmatize these multiple warhead missiles as a whole because of this one special class of the land-based systems. This idea is just beginning to percolate about sublimits on MIRVed missiles.

I guess I would just sound a cautionary note that we ought to keep in mind the distinctions among the different types of basing configurations and how they play.

Two other issues I think merit consideration and I believe are being considered by the administration as addendums to the agreed framework.

One is simply a relaxation on one of the key limits within the treaty, the 1,600 strategic nuclear delivery vehicle limit. That limit tends to constrain you from deMIRVing the land-based ICBM force. If we are going to keep silo-based ICBM's, it could be reasonable to proliferate them in more silos. We, of course, had a proposal at one point to proliferate multiple shelters per missiles. That did not fare well in the American political scene in the early 1980's. There are those who would seek to return to it. As a military technical idea,

it is a very good one. As a political idea, it still suffers from its defeats politically in the early 1980's.

Senator BIDEN. We wonder why the German people get concerned. That's just an aside.

Mr. WARNER. There are similar problems. Yes.

Senator BIDEN. Excuse me. I'm sorry for the interruption.

Mr. WARNER. In any case, I think it would be worthwhile to relax the 1,600 limit.

The final issue is one that there is fair agreement on among many specialists, and that is to try to ban the testing of short time of flight, depressed trajectory sea-launched ballistic missiles.

One of the challenges that our bomber force and cruise missile force faces is the possibility that they would be destroyed at their bases prior to takeoff, even if they are maintained on very short-notice alert.

We must be careful to try to minimize the threats that are posed to those bomber bases. One of those potential threats is short time of flight sea-launched ballistic missiles.

By all indications, neither side has tested missiles of this character yet. It would be very worthwhile to, in fact, provide an obstacle toward the development and possible fielding of systems of this nature in the future.

The two elements that remain to be resolved—they are not additions, but the unfinished business—of the START Treaty are, one, the link to SDI and the ABM Treaty, and the other, sea-launched cruise missiles.

Speaking briefly on the link to the ABM Treaty, it is clear that the Soviets are not prepared to sign a START agreement that would permit large-scale deployment of nationwide ballistic missile defenses. They want, as a minimum, continued compliance with the nondeployment, central thrust of the ABM Treaty of 1972.

Moreover, of course, they are also trying to put as many obstacles as possible to slow the pace of the overall development of the strategic defense initiative for multitiered defenses.

Now, the Bush administration, by all indications, has not yet come to a judgment about whether it is going to adhere to the traditional, or strict, interpretation of the treaty, or the so-called broad interpretation that emerged during the second term of the Reagan administration.

It has indicated that it is going to carry out a vigorous SDI research effort, and maintain long-term options, at least for deployment.

It seems to me that we ought to clarify the goals we might have with an SDI system. They seem these days to be threefold. One of the goals, the one that Senator Nunn was associated with about a year or so ago, was the possibility of a limited ground-based system to protect against accidental or unauthorized launch by the Soviet Union or by small attacks from third parties.

A second system is a much more extensive, layered defense, including space-based layers, whose primary purpose, however, is to reinforce the currently existing retaliatory deterrent posture between the two sides.

This system, though capable of intercepting perhaps thousands of opposition warheads, would still let through thousands of opposi-

tion warheads, and, therefore, it does not offer the promise of putting your survival strictly in your own hands, vis-a-vis ballistic missile defenses. But it does promise to add increased uncertainty in the views of its proponents to the would-be attacker to the Soviet Union as it might contemplate a successful strike.

The third goal, of course, is the one that President Reagan seemed most associated with, and that was, literally, a leak-proof shield, a system that would be so effective that it would, in fact, promise a relative immunity from ballistic missile attack.

It seems to me that for the next decade, in light of the currently existing technological possibilities—and these have been discussed by administration spokesmen in the last few days—we should be able to conclude a treaty, conclude a START Treaty, and link it to particular provisions vis-a-vis ballistic missile defense and the ABM Treaty, that would preserve the prohibition on the deployment of extensive ABM defenses through most of the 1990's, and that would allow the conduct of a vigorous, exploratory program to see if SDI holds promise in the long run of highly effective defenses.

But to move to case 2, particularly in a competitive manner——

Senator BIDEN. Would you restate the proposition again?

Dr. WARNER. The proposition I have is I think it would be wise for us to, in fact, conclude a START agreement and to attach to that a continued adherence to the ABM Treaty, particularly with regard to the question of the prohibition on deployment of extensive defenses, and adherence to the traditional interpretation of the treaty which, nevertheless, will provide you opportunity to do extensive testing to explore technologies that might be used for a long-term ballistic missile defense.

But the course of action that seems least wise would be to open a highly competitive deployment of ballistic missile defenses while, at the same time, almost certainly aggravating the competition in offensive forces as well.

If we are to make a transition to a defense-dominant world in the long term, in my view, that can come only with the combination of a cooperative transition to highly effective defenses which are not yet available, and it is a transition that would probably have to be accompanied by substantial reductions in offensive arms.

Given that circumstance, the real near-term or mid-term task of United States-Soviet in strategic forces is to take the step toward strategic offensive reduction, to investigate ballistic missile technologies, and then be prepared to try to work out a cooperative transition if we deem it in our interest in the long term to do so.

It is not clear to me that we can make that judgment now.

Senator BIDEN. Let me make sure that I understand this.

What you are saying, in shorthand, is that dealing with the defensive question now would generate an offensive binge. Since we don't have clear answers on the defensive side, it is better to leave that off to the side for the moment, continuing the research and testing, and deal with the offensive. This ultimately would have to be dealt with anyway, when you dealt with the defensive side if you had a serious structure that would provide you the ability to enhance defensive capability. Is that right?

Or have I misstated it?

Mr. WARNER. It's close.

Let me give one variation on this.

On the offensive binge issue, at a minimum, we will sacrifice the near-term opportunity, the opportunity in the 1990's for reductions. And it is highly likely that it could lead, as well, to competition in defense suppression, in countermeasures, and possibly even the further expansion of offensive arsenals.

But we would surely sacrifice the chance for reductions in my view if we go toward deployment soon. If we continue to do testing, particularly within the traditional bounds of the treaty, or possibly even on the margins of the treaty, we can still probably realize restraint in the near term and possibly even arms reductions.

Senator BIDEN. Thank you.

Mr. WARNER. On the issue of sea-launched cruise missiles, my primary comment is this one is an exceptionally difficult problem. Sea-launched cruise missiles with nuclear warheads are already deployed in reasonable numbers by both sides.

We are not going to be able to walk that cat back to zero, in my view. We are also not going to be able to develop a highly effective, a near-perfect, verification regime for these weapons, because they are small weapons, because there are problems of convertibility between conventional and nuclear armed variants.

So, in the last analysis, what we are going to have to try to work out, and perhaps Washington and Moscow can be content with, is far from perfect verification arrangements that set a ceiling outside the 6,000 accountable weapons, just as we agreed back in the fall of 1986, and provide for some measure of verification that both sides will confine themselves to several hundred of these nuclear armed sea-launched cruise missiles.

Sir, I had some comments on the conventional forces as well, but it is clear, and for purposes of my time, and my colleagues I am sure will relate to those, let me simply submit those for the record and be happy to share my views with you in the questioning period.

[The prepared statement of Dr. Warner follows:]

PREPARED STATEMENT OF EDWARD L. WARNER III

I welcome the opportunity to appear before you this morning to discuss the arms control challenges and opportunities facing the United States today. We confront both challenges and opportunities largely due to the apparent willingness and even eagerness of Mr. Gorbachev to conclude agreements that could involve very substantial reductions in the military forces of both sides in several areas. Moreover, the Soviets claim that they are prepared to agree to a wide range of monitoring measures, including intrusive on-site inspections, to verify compliance with these new agreements.

Clearly, the United States should only conclude arms reduction agreements that protect and advance American national security interests. Moreover, arms control reductions and constraints must be coupled with well-conceived defense programs to achieve our overall security objectives.

What then should be the major objectives we seek through such agreements with regard to nuclear and conventional arms? I believe that our most fundamental objective is to strengthen strategic stability between ourselves and the Soviet Union and between NATO and the Warsaw Pact. Properly crafted arms control agreements can enhance stability along three distinct dimensions:

-- Such agreements can strengthen *political stability* by clearly demonstrating the ability of the superpowers to work cooperatively in limiting the arms competition and avoiding war. Moreover, this cooperation can help sustain an atmosphere between Washington and Moscow that facilitates cooperation in crisis management and crisis avoidance, economic and cultural relations, and mutual constraint in regional conflicts.
-- In addition, such agreements can enhance *arms race stability* by capping and reducing military forces on both sides, banning some weapons, and providing a much greater measure of predictability to the arms competition.
-- Finally, and most importantly, arms control agreements can strengthen *first strike* or *crisis stability* with regard to central strategic nuclear forces and *conventional stability* with regard to theater conventional forces, thus reducing the likelihood of war by helping deny either side the prospect of meaningful victory.

In the strategic nuclear realm, arms control can help to achieve

first strike stability by reinforcing the stable, offense-dominant, deterrent situation that currently exists between the superpowers. Today, neither power has any incentive to use nuclear weapons against the other since no matter how the initial blow might be struck, neither could escape a devastating retaliation against the full range of military, political, and economic assets that it values highly. This deterrent posture can be strengthened through agreements that:

-- Reduce the attack capacities of the superpowers that could be used to mount strikes against the other's strategic nuclear forces, and
-- Permit, even encourage, each side to implement unilateral survivability measures for their nuclear forces, such as the fielding of mobile land-based missiles, "quiet" submarines, and fast base escape bombers able to penetrate the adversary's defenses, in order to assure that both superpowers can carry out a devastating retaliatory blow under any condition of war initiation.

With regard to the deterrence of aggression in major theaters such as Europe, arms control can enhance stability by helping to create a balance of conventional military capabilities at reduced force levels and to limit and make readily visible to the opposing side any serious preparations by either side to mount a surprise attack. In addition, arms control agreements should, in combination with defense programs, help maintain survivable, effective theater-based nuclear weapons on both sides to sustain an adequate retaliatory posture at this level and thus make clear the risks of nuclear escalation inherent in any large-scale conventional war.

Having laid out this general approach, let me turn briefly to some of the challenges and opportunities the United States faces with regard to two ongoing negotiations: the bilateral U.S.-Soviet Strategic Arms Reduction Talks (START) with its closely related question regarding the fate of the ABM Treaty and the U.S. SDI program, and the talks on Conventional Forces in Europe aimed at reducing the armed forces of the member states of NATO and the Warsaw Pact that are based on land "from the Atlantic to the Urals."

START

With regard to START, the primary decision the Bush administration faces is whether to seek to complete the START agreement largely along the lines that were agreed between the Reagan administration and the

Soviet government or to take this opportunity to also add new elements to the agreed framework. Pursuit of the latter course, particularly if the new departures would require significant additional reductions or drastic force restructuring, will run the risk of substantially delaying or even possibly forfeiting the conclusion of a START agreement. Nevertheless, it may well be possible to make mutually acceptable changes in or additions to the currently agreed framework that would enhance stability.

What might be the nature of such "new departures"? Public statements by administration figures associated with START suggest they may be contemplating the following:

-- *A ban on heavy (SS-18 class) ICBMs*. The Soviets were granted a unilateral right to deploy 308 "heavy" ICBMs under the SALT I agreement in 1972. They have agreed to eliminate half of this force in the START negotiations. Complete elimination of these missiles would remove over 3000 highly accurate and powerful warheads and greatly reduce Soviet ballistic missile throwweight, thus decreasing their potential to mount barrage attacks against U.S. bomber fly-out areas and mobile missiles in the field. The Soviets are unlikely to agree to eliminate the remaining half of their SS-18 missiles without some major offsetting concession by the United States.

-- *A ban on the deployment of mobile ICBMs carrying multiple warheads*. This step would have the benefit of avoiding the substantial difficulties that will be involved in effectively verifying the numbers of highly MIRVed mobile missiles deployed on rail cars that move periodically about the USSR. Beyond this, however, it would likely have negative effects on first strike stability. Such a ban would simply encourage both sides to deploy their powerful SS-24 and MX ICBMs, both carrying 10 weapons, in vulnerable silos rather than in more survivable rail cars where, once roaming the rails outside their garrisons, these missiles would be extremely difficult to attack.

-- *Limits on the number of multiple, independently targeted reentry vehicles (MIRVs) carried on ballistic missiles* by each side as a first step toward substantially reducing and possibly eventually eliminating MIRVed missiles on both sides. This deMIRVing process would be designed to reduce the concentration of warheads in a single silo or submarine, thus proliferating the individual aimpoints that would have to be attacked. It

would also serve to impose an unfavorable force ratio of 2 warheads expended to kill each single warhead missile destroyed within a fixed silo. In order to fully implement such an approach, one would need to raise or eliminate the currently agreed 1600 limit on strategic nuclear delivery vehicles. Unless one is prepared to deploy well over half of the authorized number of ballistic missile warheads, that is, more than 3000 weapons, on single warhead ICBMs housed in fixed silos, this approach would be unlikely to restore a high degree of survivability to the silo-based ICBM force. With the deployment of many hundred silo-based single warhead ICBMs, one would not achieve substantial ICBM survivability but could extract a significant price to attack, thus denying the attacker the chance to use these weapons to destroy other targets.

Other useful candidates for modifications to the currently agreed START framework include:

-- *A simple relaxation or even elimination of the 1600 limit on strategic nuclear delivery vehicles* in order to permit (but not force) each side to move in a deMIRVing direction and thus increase the price to attack the silo-based forces.
-- *A ban on the flight testing of SLBMs in so-called depressed trajectories* which permit them to reach their targets from a given range much more rapidly. This prohibition would be designed to prevent either superpower from attaining a depressed trajectory capability which could be used to mount short-time-of-flight SLBM strikes against bombers on air strip alert at their bases and key command centers that would be involved in assessing incoming attacks and authorizing retaliation.

Whatever the decision on new departures, in order to conclude a START agreement the superpowers will need to settle a series of major issues that have defied resolution to date. The most important of these are questions regarding the future of the ABM Treaty and its impact on U.S. plans for and the possible deployment of ballistic missile defenses under the Strategic Defense Initiative (SDI), and of possible limits on sea-launched cruise missiles.

SDI and the ABM Treaty

The Soviets are seeking to preserve the ABM Treaty ban on the deployment of large-scale ABM systems for nationwide defense and to constrain to the maximum extent possible the American SDI research and development effort. The Bush administration has not, to my knowledge, decided whether or not it will adopt the so-called broad interpretation of the ABM Treaty. However, it has stated its intention to carry out a vigorous SDI research and testing program and to reserve the option to deploy an ABM system if it is ultimately judged useful to do so.

There are, of course, first-order questions about what objectives the U.S. is seeking to achieve via SDI. Proponents of the SDI program have posited several different missile defense configurations directed toward very different goals. Most prominent among these are:

-- A modest land-based system to protect the nation from small accidental or unauthorized ballistic missile attacks by the Soviet Union or from small attacks by third countries;
-- More extensive, partially effective layered ballistic missile defenses with nationwide coverage that are designed to strengthen offense-dominant, retaliatory deterrence by increasing Soviet uncertainty about their ability to destroy U.S. retaliatory forces and supporting command and control in a first strike;
-- A more advanced layered defense that is so effective that it would allow us to enter a defense-dominant world in which we can prevent the Soviet Union from inflicting heavy damage on the U.S. via a ballistic missile attack, thus placing our survival vis-a-vis such attacks within our own hands. Most analysts believe this latter capability could only be achieved in very close cooperation with the Soviet Union that would involve agreement to reduce offensive strike capabilities on both sides to a very low level while jointly introducing extensive defenses.

Some have suggested that the U.S. should seek to achieve all three objectives sequentially, setting out initially to achieve the modest accidental launch protection system and then moving on to the more extensive and ambitious systems as the required technologies become available.

The second objective of enhancing retaliatory deterrence is the one most frequently linked to recent proposals for development of an extensive, layered missile defense. Such a system, if pursued competitively with the Soviet Union, would almost certainly have very

negative effects on political and arms race stability. Most importantly, it could lead as well to substantially decreased first strike stability if either or both superpowers were to come to believe that its combined strategic offensive and defensive capabilities would permit it to launch a disarming first strike against the other and avoid a devastating retaliatory blow.

To conclude a START agreement the United States will almost certainly have to agree not to deploy an ABM system with nationwide coverage during the term of the START agreement, that is, throughout much of the 1990s, and not to flight test in space either SDI kill mechanisms or fully integrated missile defense systems. Agreement to such terms would clearly prevent the U.S. from proceeding at maximum speed to develop and deploy an extensive SDI system with a space-based layer. Moreover, the precedent of agreeing to restrain our SDI effort might prove difficult to overcome. It would not, however, prevent the U.S. from carrying out a very substantial research effort, including a wide range of tests in space. This would likely permit the development and possibly even the deployment of improved surveillance and tracking sensors and the exploration of promising missile intercept technologies.

Given the current state of technology and the destabilizing consequences of a competitive race in extensive ballistic missile defense deployments, I believe the U.S. would be best served by seekng to reduce strategic offensive forces via a START agreement over the next decade while also carrying out a substantial research effort in advanced ballistic missile defense technologies within the limits of the ABM Treaty as traditionally interpreted. Should these research efforts yield highly promising results, and should we deem it in our interest, we could then work with the Soviets to move cooperatively toward a mutually acceptable defense-dominant world.

SLCMs and START

The superpowers have also been unable to agree on measures to limit the deployment of nuclear-armed, sea-launched cruise missiles (SLCMs). Although the two sides agreed at Rekjavik in October 1986 to seek a verifiable limit on these small, torpedo-sized weapons outside the treaty's 6000 accountable weapons ceiling, they remain far apart on this issue. Problems associated with the potential convertibility of conventionally armed SLCMs, which the U.S. plans to deploy in large numbers, to the nuclear variant and the adamant refusal by the U.S. to allow intrusive on-site inspections on our naval vessels including, in particular, attack submarines, pose virtually insurmountable obstacles to the development of a highly effective SLCM verification regime.

There do not appear to be any clear-cut solutions to these problems. On the other hand, given the fact that both sides have already deployed modest numbers of nuclear-armed SLCMs, an enforceable ban on these weapons seems infeasible and the risks and costs associated with successful cheating on a SLCM ceiling appear negligible. Thus, Washington and Moscow might prove content with far from perfect verification arrangements in this area.

REDUCTIONS IN CONVENTIONAL FORCES IN EUROPE (CFE)

The new negotiations between NATO and the Warsaw Pact on reducing Conventional Forces in Europe (CFE) opened in Vienna in March. There are significant areas of agreement in the opening proposals of the two sides regarding the basic approach to these reductions in the opening phase of the negotiations. Both seek to eliminate imbalances in selected armaments deployed throughout the Atlantic to the Urals area by reductions to a common ceiling roughly 10 percent below the lower of the two sides. Both identify tanks, artillery systems, and armored infantry vehicles as types of armaments to be reduced and both agree that the Warsaw Pact enjoys pronounced advantages in these systems.

The most serious disagreement between East and West involves the Pact proposal that reductions also be taken in tactical strike aviation and combat helicopters, areas where they claim NATO enjoys significant superiority. Although it has been agreed in the mandate for CFE that aircraft are eventually to be reduced, NATO insists that the initial phase of negotiations be limited to reductions in ground force "invasion capability" and not include cuts in aircraft. Moreover, NATO, when it turns its attention to the air power issue, will almost certainly reject the Pact's selective concentration on tactical "strike" aircraft as the proper object for reductions and, consequently, will reject the Soviet contention that NATO enjoys a substantial advantage in aviation. If, for example, all of the fighter-bombers, fighter-interceptors, and medium bombers based throughout the Atlantic to the Urals area are included on each side, data from the International Institute for Strategic Studies in London suggests that Pact aircraft outnumber those of NATO by approximately 5800 to 4100.

The Eastern position includes broad goals for the subsequent phases of the conventional arms reduction process in Europe. Their proposal calls for additional cuts of 500,000 men and their associated armaments on each side during a 2 to 3 year second phase followed by further reductions and restructuring of forces on both sides to mutual postures of "nonoffensive defense" that is to be completed by the year 2000.

NATO, mistakenly in my view, has not articulated any broader vision for the scope or shape of the reductions beyond the opening phase.

In the months ahead, pressures will undoubtedly build for the inclusion of aviation in the Phase One CFE reductions as the price for heavily asymmetrical cuts by the Warsaw Pact in ground force armaments. In my view, NATO should begin soon to formulate its position on what aircraft ought to be included and how the reductions might be taken. If it adopts a comprehensive view of combat aircraft that includes fighters, fighter-bombers, and medium bombers based throughout all of Europe and reductions are implemented to a common ceiling 10 percent below the current NATO level, the IISS data cited earlier indicates that NATO would be required to reduce approximately 400 aircraft while the East would have to cut over 2000 aircraft.

In summary, as a result of the Soviet Union's serious domestic economic and social crises, and the substantial shifts in Soviet foreign and arms control policies Gorbachev has initiated, the United States and its NATO allies appear to have an excellent opportunity to conclude unprecedented arms reduction agreements that could significantly strengthen strategic stability in the superpower central strategic and NATO-Warsaw Pact military balances. These agreements could yield significant cuts in the strategic nuclear arsenals of the superpowers and possibly eliminate the Warsaw Pact's very substantial superiority over NATO in conventional forces in Europe. To achieve these results, the United States and its allies must seize the opportunity by prudently adjusting their negotiating positions and then bargaining hard to achieve the desired reductions.

Senator BIDEN. Thank you for a very concise and yet thorough statement. The remainder of your statement will be placed in the record.

Dr. Larrabee, welcome.

STATEMENT OF F. STEPHEN LARRABEE, VICE PRESIDENT AND DIRECTOR OF STUDIES, INSTITUTE FOR EAST-WEST SECURITY ISSUES, NEW YORK, NY

Dr. LARRABEE. Thank you very much, Mr. Chairman.

I greatly appreciate the opportunity to testify before this committee today. My remarks will be divided into three parts. The first part will focus on the changing political context and its implications for conventional arms control. The second part will look at Gorbachev's approach to conventional arms control. The third part will address the dilemmas posed by short-range nuclear systems, and, in particular, I will suggest ways in which I believe the current controversy in NATO over short-range nuclear systems could be defused without compromising U.S. and Western security.

Let me begin with the changing political context.

I agree with Secretary McNamara that we are, indeed, entering a new, more fluid period of East-West relations. Many of the previous foundations of the postwar system are being challenged. NATO and the United States are being challenged to adapt their policies to new conditions.

The changes provide both important new opportunities to reduce tensions and restructure East-West relations in a more cooperative manner, but also contain important risks.

We thus need to think through carefully our goals. Reductions of conventional and nuclear forces are desirable, but cuts must be taken in such a way that they enhance stability and security, rather than decrease it.

In particular, reductions in conventional arms should not be made in isolation. We must ensure that our military goals complement and support our political goals in Central and Eastern Europe. In this regard, it is important to bear in mind that a significant reduction of United States and Soviet forces will inevitably, in my view, have political implications for the future of Europe.

When we talk about conventional reductions, we are, in essence, talking not only about changing the military structure of Europe, but also, in the final analysis, its political structure as well. We must, therefore, be sure that our military strategy is in harmony with our long-term political objectives in Europe.

We need, in particular, to elaborate a coherent vision of what type of Europe, East and West, we wish to see, and how conventional arms control and nuclear forces can contribute to this vision.

Let me now turn to the prospects for conventional arms control.

On the one hand, I think it is fair to say that the history of conventional arms control to date is not very reassuring that progress can be easily made to produce greater security at lower levels of conventional armaments. The MBFR negotiations went on nearly for 16 years without significant results. Neither side at that time seemed seriously interested in results, and neither side gave the issue high level attention.

In the last few years, however, the political context for conventional arms control, in my view, has changed significantly. The environment today is far more favorable for conventional arms control than it was at the time when the MBFR negotiations were initiated.

Two factors in particular have contributed to this changed climate. The first was the signing of the INF Treaty. This made the conventional imbalances all the more glaring, and the need to address these imbalances all the more urgent.

The second has been a change in the approach of Soviet policy toward conventional arms control. In contrast to his predecessors, Gorbachev appears to be seriously interested in conventional arms control. He has been willing to address Western concerns more forthrightly.

First, he has increased and included the Soviet territory into the negotiation zone.

Second, he has acknowledged that asymmetries exist, and expressed a willingness, in principle, to eliminate them.

Third, he has adopted a more flexible position on verification, especially on onsite inspection.

Fourth, he has proclaimed the goal of restructuring Soviet forces toward a more defensive orientation.

To be sure, to date most of the changes regarding a defensive posture have been declaratory. But lately I would submit there have been some signs that Gorbachev is serious about moving toward a more defensive posture.

The first of these came in his speech to the United Nations in December. While the proclaimed unilateral cuts in his speech would still leave the Soviet Union with advantages in many important categories of conventional weapons, if carried out, the unilateral cuts would undercut Soviet capability for surprise attack.

Moreover, the withdrawal of 5,000 tanks from Eastern Europe is particularly important because this is nearly half of the Soviet tanks in Eastern Europe.

Moreover, the unilateral cuts announced by General Secretary Gorbachev implies some de facto restructuring of Soviet forces in a defensive direction. Soviet military spokesmen have recently said that the Soviets will reduce the number of tanks and tank divisions in Eastern Europe by 40 percent, that they will also reduce the number of tanks in motorized rifle divisions by 20 percent, and that they intend to create a new machinegun artillery division in which there would be no tanks. Such divisions apparently existed on the western front in World War II.

They have also been training more to fight defensively, though the exercises have shown major weaknesses in problems of adaptation to fighting on the defensive.

Finally, in a number of areas, especially the percentage reductions below existing ceilings, the Soviet position and the NATO position are not so far apart.

Thus, there are important points of convergence which provide building blocks on which NATO can build. In addition, a number of other factors may push Gorbachev to take conventional arms control more seriously.

The first is technological. Western advances in high-technology weapons, especially precision guided missiles, may eventually erode many of the current Soviet advantages in manpower and equipment.

The Soviets are clearly concerned about the advantages that such weapons have and their implications.

Second is economic. It is in the conventional area, rather than the nuclear area, where Gorbachev can make the most savings.

Finally, there are demographic factors, particularly the declining birth rate among the Russian, Ukrainian, and Baltic populations. Over the long run, the Soviets may find it increasingly difficult to maintain a 5 million-plus army.

Senator BIDEN. Did you say declining and not climbing?

Dr. LARRABEE. Declining, yes.

Senator BIDEN. Thank you.

Dr. LARRABEE. Let me now turn to the current controversy over short-range systems.

The reductions of conventional arms will inevitably have an impact on NATO's ability to carry out its strategy of flexible response and require some rethinking, in my view, of that strategy.

At the same time, we will need to restructure our nuclear forces in Europe. However, before making any cuts in these nuclear forces, we need to carefully examine what impact these cuts would have on NATO's ability to carry out its strategy of flexible response. Any restructuring of these forces should be based, in my view, on the following principles.

First is a recognition that for the foreseeable future we need to maintain nuclear deterrence and, hence, some nuclear forces in Europe. Historically, conventional deterrence has not worked. Hence, in my view, it would be foolish and dangerous to eliminate all nuclear weapons in Europe at this time.

In policy terms, this means that we should not accept a so-called triple zero at this time.

The actual number of weapons, however, will depend, to a large extent, on the nature of the conventional balance. It is important to remember in this regard that the rationale for the deployment of our nuclear forces in Europe is to offset Soviet conventional superiority, not, I emphasize, to offset Soviet short-range nuclear superiority.

Thus, the Soviet reductions of short-range nuclear systems do not obviate the need for us to maintain our own nuclear systems, though, as noted, the number and mix of these forces may change.

The second principle is that as long as we have some nuclear weapons, we will need to modernize them. Otherwise, they will lose their deterrent value. We have to avoid unilateral nuclear disarmament by obsolescence.

Let me now turn to the most recent question of short-range nuclear force negotiations and whether to engage in these or not.

The recent decision by the West German Government to press for separate negotiations on short-range systems has pushed the SNF issue to the forefront. The divergence between the United States and Britain on the one hand and the Federal Republic and the other continental powers on the other, threatens to cause a major rift within NATO.

In the best of all possible worlds, it would be better, in my view, to delay negotiations on short-range nuclear systems until we had an agreement on conventional weapons, since the military rationale for our current military posture is directly related to Soviet conventional superiority.

However, I believe that such a position now is no longer politically tenable. The United States cannot go to Moscow and announce the beginning of negotiations on strategic weapons and at the same time tell the West German public that negotiation on short-range nuclear systems are impossible.

While there is a good military rationale for such a position, as I emphasize, it is simply not politically sustainable over the long run. Maintaining this position, in my view, risks precipitating a major rift with the Federal Republic and many of our other NATO allies.

At the same time, it gives the impression that the United States is opposed to arms control and cedes the political initiative to Gorbachev.

I therefore believe that after careful consultation with our NATO allies, the United States should announce its willingness to begin negotiations on short-range nuclear systems with the Soviets.

Our goal in these negotiations should be low but equal ceilings on each side. However, entry into these negotiations should occur only under the following conditions: first, that the West German Government commits itself fully and unreservedly to no triple zero. This, indeed, is, in fact, the current West German position, the position of the West German Government.

Second is that NATO, as a whole, supports this position.

Third is that the Federal Republic and our allies agree that the remaining short-range systems can be modernized.

Such a strategy, in my view, would have several advantages.

First, it would avoid a major rift within NATO.

Second, it would show flexibility and avoid the impression that the United States is the main obstacle to arms control in Europe, thereby increasing U.S. political credibility among West European publics.

Third, it is a strategy which is politically sustainable and should be acceptable to the West German Government.

Fourth, it is a strategy which continues to preserve nuclear deterrence.

Fifth, it preserves the option of modernization.

Finally, it would reduce the threat from Soviet short-range forces where Moscow has a large, nearly 12-to-1, superiority.

The administration understandably feels that entering into negotiations may create irresistible pressure to eliminate all short-range systems altogether. These fears, as I say, are understandable, but the strategy outlined above I believe would avoid this prospect, while preserving alliance unity.

Moreover, there may be a way to link any agreement on lower, but equal, ceilings of short-range systems to an agreement on conventional forces; that is, perhaps NATO could begin negotiations and agree on specific lower levels of equal ceilings, but tie implementation of any short-range agreement to an agreement on conventional arms.

This might provide a form of leverage to ensure that the Soviets did not simply pocket an SNF agreement, while dragging their feet on conventional reductions.

Let me conclude, Mr. Chairman, with a few brief remarks on Gorbachev's most recent initiative during Secretary Baker's trip to Moscow.

Gorbachev's offer to scrap 500 short-range nuclear warheads is a small, but positive, step. Militarily, however, it is really simply a drop in the bucket. The Soviets have nearly 10,000 nuclear warheads in Europe, and this cut would simply be 5 percent of that force.

Politically, however, the move is significant. It will increase the friction and disarray in NATO over the short-range nuclear issue. It gives Gorbachev the upper hand in public relations, and it will play very well in Western Europe, particularly in the Federal Re-

public, making Gorbachev the champion of arms control, while the United States appears to be the brake on it.

Hence, I believe that the United States should seize the initiative with a proposal along the lines suggested above. This would help the United States to regain the political initiative and, at the same time, avoid a major fight within NATO.

Thank you very much, Mr. Chairman, for your patience. I would be glad to answer any questions which the committee might have.

[The prepared statement of Dr. Larrabee was not available at the time of printing.]

Senator BIDEN. No patience was required at all. I found it an extremely coherent statement, and I think it is useful. I hope my colleagues get a chance to read both your testimonies and both your statements so far.

Barry, Dr. Blechman, welcome. I am anxious to hear your statement as well.

STATEMENT OF BARRY BLECHMAN, PRESIDENT, DEFENSE FORECASTS, INC., WASHINGTON, DC

Dr. BLECHMAN. Thank you, Mr. Chairman.

Like my colleagues, I believe that the continuing political and economic change within the Soviet Union and its allies in Eastern Europe offers the possibility of radical restructuring of international politics, a shift from armed confrontation that has dominated East-West relations for the past 45 years, toward a more cooperative and peaceful set of relationships.

Now arms control negotiations obviously cannot be the engine of such a fundamental change in world politics, but they can codify the progress which has already taken place and make it possible for nations to pocket the benefits in terms of reduced risks of conflict, in terms of relief from the economic burden of military confrontation, and in terms of political rewards.

More importantly, arms negotiations can reduce the barriers which military forces sometimes pose independently, enabling nations to tear down more rapidly the suspicions and fears that have clouded our relationships in the past.

Now, obviously, prospective arms control agreements must always be evaluated on the basis of their impact on the Nation's security. We should never make concessions in arms negotiations as a reward for favorable changes in other kinds of behavior, nor can we afford to accept unfavorable agreements on the basis of some expectations of unilateral concessions in the future.

But neither can we afford to permit the rapid changes now taking place in the world to delay the conclusion of treaties that support our national interests. The policies now being pursued by Mikhail Gorbachev at home and abroad offer tremendous opportunities to advance this Nation's security through a broad range of arms control agreements. No one really knows how long this window of negotiating opportunity will remain open. But history will judge us harshly, I believe, if we fail to take advantage of the chances now presented.

To my mind, the priorities in arms control over the next few years are clear. The first must be to conclude the draft START

agreement that has been languishing for so long in Geneva. The second must be to conclude a first phase agreement on conventional forces in Europe.

There are many other things that could be accomplished in arms control negotiations, and they should be pursued as well. But the achievement of these two objectives is not only eminently feasible, but would vouchsafe the transition from the Cold War to a new era in international relations.

Mr. Chairman, I have submitted a written statement which goes into some of these questions in some detail, and I would request that it be placed in the record.

Senator BIDEN. It will.

Dr. BLECHMAN. I would like to highlight a few elements of that before we turn to the questions, only in the areas of START and CFE.

I believe, as you do, I gather, that the draft agreement being discussed in Geneva would be a major accomplishment, not only causing significant reductions in strategic offensive forces, but building greater stability into the central element of United States-Soviet relations, thereby facilitating the further improvement of our political relationships.

The resumption of the talks this June offers the chance to make up for lost time. I think we have lost an awful lot of time for no good reason.

Personally, I don't see any reason why the treaty cannot be completed within a year. The solutions to the remaining issues of principle are clear, and that leaves only technical details to be cleared up by the negotiators.

I believe the issues of principle are only three: one, what to do about mobile, land-based missiles. Like Dr. Warner, I believe that these missiles must be permitted and counted against agreed totals, relevant agreed totals, on overall numbers of weapons.

Mobility is really the only way to even attempt to maintain survivable land-based missiles, and, given geography and the weight of history and past investments, there is really no choice for the Soviet Union but to move toward mobile systems. We have to accept that.

Thus, the issue is not whether mobile systems are permitted, but how to count them how to verify the numbers that are said to be deployed.

Given the Soviet Union's positive approach toward intrusive means of verification, I do not believe that verifying these limits are that difficult, either, and, as a technical question, that could be worked out very quickly.

The second issue is sea-based cruise missiles, which is a more difficult one, given the small size and versatility of these weapons.

I think it is important at some point to place limits on the nuclear armed land attack variants of sea-based cruise missiles. One way to do this would be to restrict these weapons to designated classes of surface ships and submarines and through a negotiated formula count some number of such weapons for every ship or submarine of that class, and to count them against agreed totals of strategic weapons.

A corollary to such an approach would be to ban all nuclear weapons on all other classes of surface ships and submarines, except, of course, for SSBN's on which we have ballistic missiles.

However, much work remains to be done in evaluating this approach and its impact on other kinds of naval capabilities, and in developing the means of verifying such an agreement. We really have to do some experiments in this area.

I think too much work has to be done to include cruise missiles in the current draft treaty without delaying it excessively.

As an expedient, the two sides could simply agree not to increase their already planned deployments of sea-based cruise missiles to offset reductions in other kinds of weapons mandated by the treaty. This could be accomplished through reciprocal, unilateral statements in which each nation announced its current plans over the planned lifetime of the treaty and pledged not to exceed those plans without consulting the other side beforehand.

This would not have the force of a treaty, but it would provide a record of where we are going and take care, I think, of the possibility of these programs being increased to offset other reductions.

The third issue concerns the ABM Treaty and strategic defenses, and, like you, I believe that limits on strategic offensive forces can only be enforced as long as these constraints are maintained on defensive systems.

If you will recall, in the early 1980's, the START negotiations were complicated by the Reagan administration's concerns that the Soviets were planning to break out of the ABM Treaty. These concerns have been eased.

I think the Soviets could ease them even further by dismantling their radar at Krasnoyarsk and leveling the building. Since they have maintained that this facility will not be used for military purposes in any event, they really have little to lose by removing all traces of this violation of the treaty.

At present, or more recently, the negotiations were more seriously complicated by Soviet concerns that the strategic defense initiative would lead us to withdraw from the ABM Treaty. I do not believe that this should be a pressing concern, either.

The program has already been cut back by the Bush administration. It will almost certainly be cut back further by the Congress as it reviews the defense budget. Despite the fertile imaginations of some enthusiasts, SDI technologies have really not developed nearly as quickly as had been hoped. Some notions have already disappeared, like the much ballyhooed x-ray laser. Budgetary limitations, the laws of nature, and political constraints will delay or defeat others.

For example, one of the first tests of a laser system that would have challenged the ABM Treaty's prohibitions, the so-called Zenith Star test, has been delayed by 2 years already, until 1993, at the earliest.

In short, there is no reason to permit concerns about strategic defenses to delay conclusion of the START Treaty. The two sides should discuss their respective plans for tests of these systems in the working group which has been established for that purpose, but no other action is required.

We have a treaty prohibiting defenses. The treaty works. The treaty is of indefinite term.

If the Soviet Union feels that it simply cannot let the matter drop, a unilateral statement to the effect that it would consider the abrogation of the ABM Treaty to be a matter of supreme national interest, and, thus, to merit exercise of its withdrawal rights from the START agreement would indicate its position clearly for the record.

Let me turn now to the conventional forces talks in Vienna, which really get at the heart of the East-West military competition.

The United States and its allies have a great deal potentially to gain from these talks. Negotiated reductions in Soviet forces deployed in Eastern Europe and the Western portions of the Soviet Union can not only constrain the U.S.S.R.'s ability to mount surprise attacks and to sustain offensive operations, but can reduce the weight of Soviet power on Eastern Europe, permitting even greater diversity among the states of the Warsaw Pact, and perhaps causing their governments to become more responsive to the desires of their people.

If we are to liberate Eastern Europe, it will result not from policies of confrontation, but from the development of cooperative relations in Europe, including agreements to greatly reduce military capabilities.

A CFE agreement also would benefit relations within NATO by making possible reductions in forces deployed in West Germany. An agreement would reduce the economic burdens of the alliance on this country and on our allies, and it would reduce the social and psychological burdens on the citizens of the FRG. It would, thus, ease the growing political strains within the alliance, facilitating common development of practical steps to adjust United States-West European relations to contemporary realities.

Now, although the two sides' lead-up to the CFE talks have been very different, the actual positions tabled in Vienna in March are remarkable mainly for their similarities. As a result, I believe it is possible to reach an agreement by 1992.

I suspect that Mikhail Gorbachev will ensure that the first phase is concluded even before that date.

A great deal of work has to be done to meet this deadline. But the basis of an agreement to make the two sides' ground forces roughly comparable at about 10 or 15 percent below current NATO levels is already on the table, which would be a very significant achievement.

There is only one issue of principle standing in the way of such an early agreement: whether or not limits on tactical air forces should be included in the first phase treaty.

The Soviet position calls for such constraints, and the mandate for the talks makes them legitimate. But the complications of negotiating limits on aircraft would make it difficult to include.

Aircraft are more mobile, can be used more flexibly, and have more diverse missions than ground forces. We understand their impact on the ground battle only poorly, and we understand how to compare diverse kinds of aircraft perhaps even less well.

My preference would be to establish a working group within the Vienna talks to work out the special problems of placing limits on tactical air forces and to commit to including limits on aircraft in a second-phase CFE agreement, but to exclude them from a first-phase treaty.

At the level of forces envisioned to remain after the first phase, this should not be a problem militarily for NATO or the Warsaw Pact. Whether or not the Soviets are prepared to accept such an expedient politically, however, remains to be seen.

Now, discussions of tactical aircraft also have implications for the two sides' nuclear capabilities, and I would be remiss not to mention the current controversies concerning the modernization of and the negotiations about short-range nuclear forces.

I believe strongly that the risk of nuclear war has played an essential role in deterring aggression in Europe and in causing all states there to perceive advantage in developing more peaceful and cooperative relations.

Further, I believe that the presence of so-called battlefield nuclear weapons on the continent is essential to maintain the credibility of our nuclear guarantees, as well as the effectiveness of NATO's strategy of flexible response.

I believe it has been the case in the past, it is the case now, and it will remain the case for the foreseeable future.

Agreeing with these propositions, however, is not to endorse either the need to modernize LANCE missiles or the administration's refusal even to consider negotiations on short-range nuclear weapons. To my mind, an agreement to eliminate all short-range missiles from Europe would be a tremendous advantage to NATO as it would take away what could be a key element of a Soviet offensive, that is, preemptive attacks on NATO airfields, command and control sites, and POMCUS storage facilities by pact missiles armed with nuclear, chemical, or even conventional munitions.

So long as such an agreement; that is, a third zero restricted to missiles, so long as such an agreement permitted the retention of some nuclear artillery and some air delivered weapons, perhaps at greatly reduced levels, it would be sufficient, I believe, to maintain the nuclear component of NATO's strategy.

Now, the argument between the United States and Britain on the one hand, and West Germany and many other nations in NATO about LANCE and negotiations on short-range nuclear weapons is really about more fundamental issues, and we should recognize that. The establishment of NATO and United States security guarantees to Western Europe contained Soviet power and made possible the recovery of the war-ravaged economies of Western Europe.

It also established, however, a certain political relationship between West Germany and its former enemies. In effect, the West Germans accepted limits on their national sovereignty in return for security guarantees and the opportunity to recuperate economically.

Not surprisingly, after 44 years, two generations, the West Germans have tired of the arrangement. They now want accelerated progress toward the creation of political arrangements between East and West, in which ties between the two Germanies will flour-

ish and in which, eventually, political reunification might become feasible.

They want a reduction in the visible manifestations of the foreign military presence on their territory, and they want a stronger say in what they now perceive as the greatest threat to their security, the risk of nuclear war.

No West German Government can ignore the strength of this opinion, nor do I think the demands to be unreasonable or contrary to American interests. Over the long term, I believe the United States should work toward the achievement of basic freedoms and democracy in all nations in Europe, East and West, and toward the replacement of the current security regime with one featuring more cooperative and peaceful relations among all states.

In thinking about how to achieve such an objective, it is clear that Germany has an essential role to play as a bridge between East and West, helping economically and politically to bring the nations of Eastern Europe out from Soviet domination.

An effective arms control regime is a prerequisite for such a positive German role. Conclusion of a first phase agreement in Vienna on conventional forces is a necessary first step.

Once such conventional parity has been achieved, however, limits on short-range nuclear capabilities would not only become feasible, but would be an essential part of the new security framework for Europe.

Mr. Chairman, in my statement I touch also on the negotiations on chemical weapons, negotiations for a nuclear test ban, and some other items. I think I will skip these now and close, and I welcome your questions.

[The prepared statement of Dr. Blechman was not available at the time of printing.]

Senator BIDEN. Thank you very much.

Let me begin, because it is on my mind at the moment, with you, Dr. Blechman.

I am fascinated by your discussion of the West German situation. I do not think there has been enough discussion about the West German situation, not merely as it relates to SNF and the modernization of LANCE but because of much broader, more fundamental concerns of a whole new generation of Germans, who are now coming to political, economic, and every form of power in West Germany. I think there is a lot of rethinking going on, whether or not we acknowledge it.

Yakovlev and Fallin—I hope I am pronouncing both their names correctly—have been arguing within the Soviet Union for some time with Gorbachev that Gorbachev, as I understand it from the Sovietologists that I have been reading and listening to, is making a mistake in attempting to resolve the Soviet Union's European concerns and problems—all of which have been addressed directly or indirectly here today—by attempting to deal with the United States. Why not go directly to the West Germans, bypass "go," and head straight to the West Germans.

Now you have indicated in your statement here, if I may overstate it in the interest of time, that basically we have to go back and take a look at what is happening in West Germany and under-

stand that there is a need for us to pay more attention to what is going on in West Germany.

I would ask all three of you this question, starting with you, Dr. Blechman. Do you believe we should be concerned about whether or not the Soviets will begin to go straight to the West Germans on conventional questions and short-range nuclear questions, and other questions, as has been suggested by two major players in the Soviet Union? Are they likely to do that in the face of the sort of "status quo-plus" mentality that is prevailing for the moment here in this body, as well as in the administration?

Dr. BLECHMAN. No, I do not think that is a concern. I think it would be a terrible mistake on their part from their own perspective.

I think if they play that card too strongly, they will scare the rest of the West and undercut exactly what they have been accomplishing through much more subtle strategy.

Essentially, this is what they tried in the early 1980's, on the INF debate, and I think it was Fallin who was partly responsible for it at that time as well. It backfired. It drove the Germans back toward the West. It permitted the INF deployment to go ahead and contributed to the defeat of the SPD in the West German national election. I think it would be a mistake.

I think Gorbachev is too smart to make that mistake again.

In effect, he still appeals to the Germans. But he does it within the framework of the alliance and within a much broader multilateral negotiation. I think it is more successful for him. And, if we pursue this status quo, maybe something else, a policy might come I think that plays right into his hands and guarantees his success through this more subtle approach.

Senator BIDEN. A direct answer to a direct question.

Dr. Larrabee.

Dr. LARRABEE. In principle I agree with Barry. However, I do detect a change in Soviet policy, a greater interest in what is going on in the Federal Republic, and I do think it is a situation which needs to be carefully and closely monitored.

In my view, the Soviet Union has not given up, obviously, its interest in the United States and an accommodation with the United States. But it is pursuing a much more multipolar and balanced policy, and within Western Europe, the Federal Republic is the centerpiece of that policy.

You had a situation where, after 1979, the Federal Republic, where there was an effort by the Soviet Union to isolate the Federal Republic, and some attempt I think when Gorbachev came to power to try to woo France.

I think Gorbachev has seen that that policy is unlikely to work and he has begun to shift Soviet policy toward the Federal Republic, to again pursue a much more conciliatory policy, believing that the gains over the long run for the Soviet Union are much greater if the Soviet Union tries to woo West Germany, rather than if it tries to isolate the Federal Republic.

Senator BIDEN. Thank you.

Dr. WARNER. I agree with my colleagues.

I think that Steve is closer to the issue, than Barry, though it is not one at the exclusion at the other.

There has been some theory among Sovietologists that Yakovlev, in particular, was a kind of "go slow on America and do everything with the others" person. That just has not proven to be the case for 4 years. Yakovlev has risen, but the policy has been really a simultaneous policy of engagement. It has elements for all of the partners.

It clearly tries to sow and exacerbate tensions within the alliance when it is within the Soviet interest to do so. And they clearly see it as within their interest to exacerbate those tensions now on this question.

The fundamental Soviet purpose in the arms control security area here has been denuclearization. I mean, the denuclearization clearly does not work in Western interests, at least in my view, at least full denuclearization; arms control and arms reduction, yes, but denuclearization, no.

Senator BIDEN. Would you define for the record what you mean by "denuclearization" of Europe. List the systems, even by name.

Dr. WARNER. Let me say that even more broadly, in its most thorough form, Mr. Gorbachev proposed in January 1986, that there be a banning and a ridding of the world of all nuclear weapons.

Senator BIDEN. I understand that.

Dr. WARNER. In Europe, the nuclear systems that now exist, for the moment, going from top to bottom, we have at longer ranges the dual-capable aircraft, the fighter bombers; we also still have a few land-based missiles of the longer range that will be eliminated by the INF Treaty when it runs its course.

We finally have at the shorter range the tactical ballistic missiles, the LANCE on their side, and on their side the FROG, the SS-21, and the SCUD missile.

Finally, we have nuclear capable artillery.

People have said earlier—and I have not commented on this—in somewhat distinction to Mr. McNamara, though the Secretary is careful on these questions, I believe that a residual nuclear deterrent on the land, in the theater, is necessary. And then the real quarrel is how much can you reduce what is the right mix of a reduced force posture. The fear is a slippery slope fear.

Senator BIDEN. Let me stop you there if I may. I agree with you, but I want to get this clarified and on the record.

Why is it important that this specter of a denuclearized Europe; that is, no nuclear weapons based on the land in Europe, why is it important that that not occur?

Is it important for political reasons? Assume, by the way, for the sake of argument here what everybody has basically assumed who suggested that—and none of you have suggested that but others have—in the context of significant reductions to parity of conventional forces.

Why is a denuclearized Europe a danger to Western security if there are significant reductions to parity of conventional forces? Is it political, is it military, or is it both?

Dr. WARNER. I think it is both. Clearly, the necessity, the emphasis on that, on retaining that capability on NATO's part, is less if the conventional imbalance has been corrected.

For the flexible response strategy, with forward defense by conventional weapons backed by nuclear retaliatory options, from small, from short-range to larger range, to central strategic, was most necessary when we were clearly, as we are today, still outgunned substantially by the Warsaw Pact.

If that outgunning can be eliminated by reductions to a common ceiling, then the necessity is less. But I still agree, I think, with what Steve Larrabee said: "Conventional deterrence in the long-run has not worked." We have had a history of relying strictly on conventional deterrence.

Moreover, nuclear weapons cannot be disinvented.

Senator BIDEN. Let me stop you there if you don't mind. I want to take this one piece at a time.

We would still have sea-launched cruise missiles. We would still have dual-capable aircraft on aircraft carriers, all within the European theater but not on the land.

So, it seems to me, thus far, that you have not answered the question about the military significance of nuclear weapons on the land in Europe.

Dr. WARNER. Of the two—let me conclude and let my partners get a short at this—I believe that the political significance is having them literally on the land, in the theater.

Now, even the aircraft, if you have tactical aircraft, not on carriers, can do part of that qualification. They must certainly are on airbases in the theater.

Militarily, the virtue of diversity is one for survivability, for making clearer the potential use in a number of modes, in a number of circumstances.

Senator BIDEN. But isn't a clearer potential use a political clarity, not a military clarity?

Dr. WARNER. The mix in deterrence, the mix between a military threat of retaliation, its impact is always political; that is, the war is being run by political leaders. Whether they start it, whether they continue it would all be based on, if you will, political-military decisions. I cannot trust that.

Senator BIDEN. If you were a wag and wanted to be the devil's advocate—and I would ask you all to jump into this—let me be the devil's advocate here and argue the following.

The likelihood of using nuclear weapons decreases in direct proportion to their availability in the theater and the requirement that NATO make a judgment that they be used as against a single decision made by a single individual under the singular control of the President of the United States about a weapon on the back of an aircraft carrier, or in the belly of a submarine, or on the back of a platform that carries a cruise missile.

In other words, I have been sharing your view for years and I am beginning to doubt my own wisdom on this because as I asked the two leading generals in NATO this very question, they could not give me a good answer. The answer I get back is "Well, they would know where it came from." A President would be less likely to use a weapon on the back of an aircraft carrier than from an airfield in Europe because then somehow the Soviets would know that "aha," it came from an aircraft carrier and, therefore, we're going

to hit New York, or it came from an airbase in Europe, therefore they are going to hit Bonn.

Talk with me about this. All of you, jump in.

Dr. BLECHMAN. The issue I gather is not whether we need any nuclear weapons to strengthen the deterrent, but whether those weapons have to be based on the ground in Europe.

Senator BIDEN. Yes, because that is the issue, isn't it?

Dr. BLECHMAN. Yes, it is.

Senator BIDEN. If we accept Dr. Warner's proposition that the objective of the Soviet Union is to denuclearize Europe—a proposition I have some trouble with, but that is another question.

Dr. BLECHMAN. To my mind the deterrent value of these weapons has increased tremendously when they are an integrated part of our planning for warfare in the theater. When it's a part of normal military routines and practices, this provides strength to the deterrent, which you don't have when it would be some sort of external, final step taken by the President.

I think if the Soviets know, in fact, that the American military and its allies, the French and others, plan, as soon as they start to lose this conventional conflict, and have the means and the practiced routines and so forth, to utilize these weapons, they can foresee a time that, even if they did well conventionally, they had a brilliant plan or something that could overrun NATO, they would know that the American commanding general would be on the phone very quickly, requesting permission to implement Plan Bravo, or whatever it is.

Senator BIDEN. For the record, on the phone to whom?

Dr. BLECHMAN. Well, he would be on the phone to SACEUR, presumably.

Senator BIDEN. Right.

Now, couldn't we solve that—again, being the devil's advocate—if we assign to General Galvin and to NATO a couple of submarines and an aircraft carrier, and began to plan all the exercises, like we plan them now, integrating in normal military practices the use and availability of those weapons on and in those vessels?

Dr. BLECHMAN. It diminishes some of my concerns. But I'd feel better about it having them in the theater itself, with the army forces themselves.

From another perspective—I mean, I happen to think that nuclear artillery plays an especially important role, and would not like to see those reduced.

Senator BIDEN. Let me be general with you for a minute: nuclear artillery, so much of it there, so quickly, makes it impossible for me, as a commanding general, who has to negotiate the movement of that artillery all over the front, to get myself into a position where I either can manage it or use it.

If I am a commanding general and I have thousands of warheads on a number of pieces of artillery, it seems to me I spend a good deal of my planning in dealing with the attack that is coming forward, having to balance between making sure that they are not coopted, at the same time making sure that I don't use them because I don't want to use them until I have gotten to the point where I have concluded I have to use them, and I only get to that point when I have concluded my conventional forces are overrun. There-

fore, I have diminished my ability to be able to keep from being overrun because so much of my planning is required to see to it that those very things that I'm not going to use until I am overrun have to be moved out of harm's way.

Dr. BLECHMAN. It is certainly a complication, and it has been made worse by the excessive size of the forces we have there. I certainly think the numbers could be reduced drastically.

However, I think there are, in contrast to Mr. McNamara's statement, limited uses of nuclear weapons that make sense militarily on the central front.

Senator BIDEN. I'm not arguing with that. I am not arguing that proposition. I am raising, as the devil's advocate, the proposition of where those nuclear weapons have to reside. That is the issue. That is not a McNamara point. It is a Biden point.

So, let's leave McNamara out of this. He is a "straw dog" in this one now.

Dr. Larrabee.

Dr. LARRABEE. Perhaps I can say one word.

I tend to agree with Barry that having these weapons—and we're talking about those on land—as a part of an integrated strategy is important. That's one.

Two, obviously deterrence in the final analysis is a political-psychological concept.

You have focused on the difficulties from the Western side. I would ask you then to think about the difficulties from the Soviet side and the uncertainty that still remains in the minds of a Soviet commander. If, in fact, he has breached the NATO defenses, I still believe the deterrent effect and the uncertainty is greater if there is something on land than if the connection is with something that is sea-based.

Senator BIDEN. Why?

Dr. LARRABEE. Again, I think this is psychological.

Senator BIDEN. I don't doubt that it is psychological. But why do you think so. You be the Soviet general and I'll be the Soviet general, a role that the Soviets should be thankful neither of us are, at least that I am not.

Be the Soviet general with me for a minute.

Now you are about to breach the line. Do you think that it is more likely that the soldiers in charge of the weapons, the guy with the key, but also the people there who are the nationals of the very country upon which they have just breached the area, are going to be more or less inclined to drop nuclear weapons on their wives and children who were left behind because they got pushed back? Or do you think that someone sitting in the ship, assigned to SACEUR, and an American general at the top, going through the usual routines they have to go through is likely to free up and use those weapons?

Be the Soviet general for me here.

Dr. LARRABEE. Let me just take one step back.

One of the things that I tried to suggest, and I think this is at the heart of the LANCE debate, is yes, you have a valid point if, in fact, you are relying on artillery which only has a range which will hit your wife and child, but not the other side.

If, however, you were to reconstitute and restructure your force, your nuclear forces, at a lower level, at lower ceilings, and at the same time extend the range, I think that part of this problem then is negated. But, as long as you have the type of artillery that we have in our arsenal today, your point, and the psychological impact of that, I think is true.

That is why I would argue for a restructuring.

Senator BIDEN. I am a supporter and have been a supporter, and believe we should move forward, and made a speech recently at NATO that we should move forward on modernization, in terms of developing the weapons, just not moving forward on requiring commitments at the front end.

I don't know who started this malarkey that if we don't get it done, we're bringing the troops home. That is not what I hear in the cloakrooms, the Democratic or the Republican cloakrooms. Yet, among the experts, we are told, and you turn on the television and you hear that well, if, in fact, the Germans don't commit now—this was the statement a month ago—if they don't commit now, those fellows and women in the Congress, they're going to say our boys aren't protected, so we're going to bring them home.

I didn't hear anybody here say that. I heard that on TV, but I didn't hear it anywhere else.

Dr. WARNER. Senator may I make one correction on the listing of things?

Senator BIDEN. Yes.

Dr. WARNER. The SACEUR also has long had available to him an element you've talked about; that is, supposedly an allocation of some number of Poseidon missiles on submarines.

He may also have sea-launched cruise missiles, nuclear armed.

So, my list of four should be six, and at the top of the longest range are the systems you are talking about.

Senator BIDEN. I see.

Dr. WARNER. So, those already exist. What you are really proposing, as the devil's advocate, is the possibility that we rely only on those, and then you have heard the colloquy.

Senator BIDEN. I think the real issue here has been—and I will drop the issue now—but I think it clarifies that, "fellas," at best we've got a marginal case. I mean, there is no overwhelming case that I have ever heard anybody make about having nuclear weapons in Europe in the hands of NATO, as opposed to those French weapons that are already in Europe, and those British weapons that are already in Europe—this is like theology.

I went to a Catholic school and used to have to debate the priests on parts of "Summa Theologica." We had to read sections of it, and you'd get into these discussions.

We are into a nuclear theology here. We don't know what the hell we're talking about, any of us, with all due respect, because we don't know how any of this would proceed, and that is what makes this all kind of "iffy."

But, everybody that I have heard talk about the third zero is talking about a third zero where they said land-based systems.

I have not heard anybody make the argument that this applies to the theoretical—and it is classified whether or not it is or is not assigned, and I don't know, I'm not going to confirm or deny that—

but if there are submarine-based missiles, or sea-based cruise missiles that are part of this brief that is available to whoever SACEUR is.

At any rate, I think the overwhelming question relates to the politics of it.

I am delaying the next panel too much. But it seems to me that the political rationale is one that we have relied upon heavily. The notion being that if the Germans want us to defend them—even though it is in our interest to defend them—but if the Germans want us to defend them, they have to be prepared to show that they are willing to take a piece of the poison along with us. Although the Germans make the singularization argument—I head up a little committee in the parliamentary arm of NATO on nuclear and conventional planning, and they always make the singularization argument—I point out that the United States is the most singularized nation in the world, if you consider singularization as being based upon targets of opportunity for the Soviets—required bases they must hit if there ever is a nuclear war. I mean, we are, you know, in the ozone, by the time this issue gets discussed more fully.

But the argument has been—and I am beginning to wonder about the validity of that argument—that we must, in order for them to show resolve, each have a piece of the poison, the "poison" being nuclear weapons.

How important is that political argument today? Leave aside the military significance of artillery, or follow-on to cruise, or the value of an MLRS, whether it is conventional, or TASM, if we ever get it. Leave all that aside for the minute. What is the political significance?

Then I won't ask you any more right now on that.

Dr. BLECHMAN. I don't think the singularization is particularly important. The Germans do accept quite a heavy burden for NATO defense. They are the site for the battlefield. That is unavoidable. They host 400,000 foreign troops. They have the disruptions in their normal lives which comes with the exercises, the flights, and so forth.

So, they are certainly assuming quite a burden for the overall alliance defense, which other members don't share.

There is the point that if you remove the ground-based weapons, you are, in effect, taking out one of the lower steps in the potential escalatory ladder.

We already have the sea-based weapons, and you are saying well, it's safe enough and we don't need this extra firebrake in there. It's a question of judgment whether the development of relationships has gone far enough to take that risk, to merit that risk.

Senator BIDEN. You already took out a big step—probably the last one we should have taken out—when you took out that one which says from the land you can strike the Soviet Union.

Dr. BLECHMAN. Exactly.

Senator BIDEN. It seems to me that it made a lot more sense when that existed, because the Soviets then wonder if I cross, do my troops get zapped, or does my country get zapped with nuclear weapons. In that context, then this escalatory ladder seems to me to make a lot more sense.

We took that rung out, it could be argued, prematurely.

Dr. WARNER. We took a portion of it out. The aircraft could still do that as well. The aircraft could do it before; the aircraft can do it now.

Senator BIDEN. True. That's a valid point.

But, by that time, the argument has always gone, here they come, boys, let's get New York now. So, a President has to sit and make judgments.

Anyway, it gets so, so crazy.

I don't know why I'm doing this now that I say it all. Let me move to another question and ask you all to comment on Barry's assertion, which I have heard come from centrists as well as those who label themselves as very conservative analysts.

It is this. From a totally different perspective, there would potentially be a military benefit from a third zero. And the military benefit you spoke to very briefly, Dr. Blechman—and I will characterize it, but I would like you to elaborate on it.

No. Why don't you just tell me, just elaborate on the military, the potential military benefit flowing from a third zero.

Dr. BLECHMAN. If the Soviets maintain a very large number of short-range missiles, SS–21's, and older varieties, we believe that if it ever came to a pact attack on NATO, that attack would be initiated with massive strikes, utilizing these missiles, as well as aircraft, probably, but particularly these missiles against NATO airfields, against command and control sites, against the sites where we store equipment for the divisions to match up with; and this potentially could be devastating. It certainly would if they were to use nuclear weapons or chemical weapons. But even with conventional munitions, if their missiles are accurate enough and it is coordinated properly, it could disrupt our ability to mobilize our own forces, to bring American troops over there, and to stop the attack somewhere near the front lines to maintain a forward defense.

If we go to a third zero in missiles, we are rid of all that. We are giving up this handful of missiles, which we have on our side, which have, I suppose, some conventional roles, but mainly this nuclear role; and getting a much larger return in terms of military capabilities.

Senator BIDEN. Wouldn't elimination of those missiles increase in potential benefit as the number of attacking troops decreases?

Isn't there a direct relationship between the ability, if there are equal ceilings? If they are going to attack, don't the Soviets need those missiles even more than they would if they have a conventional force?

Dr. WARNER. He is using them in the conventional attack. That is how Barry is using these.

Senator BIDEN. Yes, I understand that.

Dr. WARNER. The problem on that is, No. 1, I think the only way you use TBM's, tactical ballistic missiles with conventional warheads today or for the next several years, is in conjunction with aircraft, because they are not effective enough on airfields, as they currently exist, and runway operations.

Senator BIDEN. We always make the argument that they are, though, right?

Dr. WARNER. I don't believe that they are yet, and it will be some time before they are.

The other thing that Barry left out was the United States was on the brink of developing its own capability here, the Army Tactical Missile System, or ATACMS.

Senator BIDEN. Right.

Dr. WARNER. It is not so much designed, as a matter of fact, it is not designed at all for antiairfield attack, but will be designed to go after maneuver forces coming into the battle.

Senator BIDEN. Yes.

Dr. WARNER. We believe for the near term that we have a considerable technological lead, both in the interlinking of systems to make this useful, and we hope to have, though it is still a prospective than an actual in-the-hand-capability——

Senator BIDEN. It sure is.

Dr. WARNER [continuing]. We hope to have the capability to try to address armored vehicles much more effectively.

So, the balance will have to be, No. 1, how bad do you think the threat is on tactical ballistic missiles today to both airfields, maneuver forces, and surface-to-air missile sites; how bad do you think it will be in the future, and what is the relative balance of the two sides' prospects in these areas.

It is a longer issue there. But that is what you have to get at.

Senator BIDEN. I could not agree with you more. But it seems to me that you must take into consideration that we—the United States and NATO—have not developed a TACM—and we have not—to the point that allows you to get behind the attacking troops, to knock out those troops that are coming up to reinforce the attacking troops. If we don't have that capability, it seems to me there is a direct relationship between the number of attacking troops and the need of the attacker, who is operating on surprise, to be able to have available to him these weapons, conventional or nuclear, that are on missiles that can get there quickly, to knock out the very thing that they fear the most.

So, it seems to me, no matter what scenario you come up with, as you reduce the numbers to equal ceilings and then lower them, the availability of the dual-capable systems, whether they have missiles with nuclear or conventional warheads, increases are needed more by the attacker than the defender.

Explain to me why that is not true.

Dr. WARNER. I don't think that's clear.

It is useful to both, and it would be very difficult to say which one has the greatest advantage.

Senator BIDEN. I am really learning from and enjoying this too much. I'm sorry, because I'm going on too long.

Dr. Larrabee, did you want to comment?

Dr. LARRABEE. Yes, just one comment on the political side for a second.

I do believe, as I said, that our goal ought to be the separate negotiations on short-range nuclear systems to equal low ceilings, and I do believe that it would be important to retain some capability, at least for the present.

One of the reasons is I do think independent of the military rationale, for a second, the political signal that would be sent if we

were to reduce completely to zero at this particular time, would be rather negative and could even be damaging over the longer run to conventional arms control. This is to say that I believe it would, in some circles, obviously, stimulate a feeling that the United States was really practically withdrawing, I think, from Western Europe.

This would not be true, objectively speaking. But the political perception, I think, would be enhanced in the wake of Reykjavik that the United States was withdrawing.

So, therefore, I would say, for political reasons as well as military reasons, a strategy of moving to lower but equal ceilings at this time, tying it to the conventional balance, is a far more prudent policy. It may well be true that somewhere down the line, after you have had a first phase conventional agreement, and after you have gone through a restructuring of your forces, that you might be able to consider a triple zero. But I do not see that as being a prudent option now.

Senator BIDEN. I could not agree with you more. So that the record is clear, when I was being the devil's advocate, I started off with the proposition that our discussion was in the context of an already negotiated, much lower, equal ceiling conventional force structure.

The reason that brought it all on was because I was intrigued, Dr. Larrabee, by your proposal on how we should deal with the "German question" that is now dividing the alliance or at least causing some difficulty in the alliance. That is, with regard to the modernization question, your proposal was almost precisely what I have been proposing the last week or so, with one exception. You insist upon an absolute commitment now from the German Government not only an acknowledgment by them that this would be tied to success on the conventional front, and they must then promise to modernize.

Dr. LARRABEE. No. I didn't mean that they should promise to modernize, but that they should accept the possibility that modernization could be carried out if it proved wise and prudent to do so.

Senator BIDEN. Good.

Dr. LARRABEE. So, I would postpone that decision. I would not undercut Mr. Kohl and the elections.

Senator BIDEN. OK.

Dr. LARRABEE. But I would hold open that option.

Senator BIDEN. I happen to agree with you.

There was a third point, though, that really got me going on this, which is the point I thought you made—and correct me if I misunderstood you, as I did on the last point—that there must be an absolute promise now never to go to zero.

I thought that's what you said.

Dr. LARRABEE. I may have said that.

Senator BIDEN. But I have convinced you to keep that open?

Dr. LARRABEE. I guess I would phrase it in a way that now, to promise at this particular moment that we would not go to zero, but I would not exclude it.

Senator BIDEN. Then we are in agreement.

Dr. LARRABEE. As Margaret Thatcher said, never say never.

Senator BIDEN. That's right.

It may very well damage your reputation, seriously, to suggest that we are in agreement. [General laughter.]

Senator BIDEN. Dr. Warner, I thought your exposition was absolutely brilliant in terms of laying out many aspects, but particularly in laying out for the public, the press, and my colleagues and me what really we have to be considering.

You went down the list of what the agreed framework is now, the debate as to what should be added, if anything, to change the framework, and what are the most difficult pieces of the existing framework.

One of the things that you pointed out, which is being debated now, if we can believe the press reports, and I believe it would be logical for it to be debated within the administration, is the 308 versus 154 versus zero level on SS–18. This all relates to the notion of whether or not our existing land-based systems are survivable, and their survivability decreases in direct proportion to the number of SS–18's that are available.

That has been the argument so far.

I think I am going to go to Dr. Blechman first and end with you, if I may.

I read a very informative piece that you wrote. I can't remember in which publication it appeared. But, basically, it said this. "This SS–18 argument has been around for a long time. Why don't we just acknowledge that it or some other version of it is going to be around for a long time? Our land-based systems are going to be vulnerable. There is no way we can guarantee and eliminate their vulnerability. Why don't we stop this malarkey about talking about building additional mobile MX's and going and spending $30 billion to build mobile Midgetmen to solve the problem. Why don't we move on from this debate."

Am I accurately reflecting that?

Dr. BLECHMAN. That's correct.

It's 20 years ago this year that the Soviets first flight tested an SS–9, which we thought then would make our ICBM's vulnerable. We have been trying for 20 years to get rid of the problem.

I do have one solution, which is to combine Midgetman with MX, the rail mobile MX. We can take the little Midgetman and put it in the luggage rack on Amtrak.

Senator BIDEN. Now, you know, I ride Amtrak every day. I'm the only Senator that commutes every day. I hope you don't designate me the carrier of that. I may lose it somewhere along the line. [General laughter.]

Dr. BLECHMAN. I really do not understand why it is we believe we have to maintain ICBM's as a survivable component of the strategic force.

I think we should have ICBM's. They have special missions. They are more reliable, more accurate, and more flexible than any other component. We should have them for very special kinds of limited contingencies.

But that does not mean that they have to be able to survive a first strike. I think we can maintain a survivable sea-based component, perhaps two if we want to move away from the expensive Trident. We can maintain a viable bomber force and are spending a great deal of money to do that.

We should just recognize point blank that our ICBM force is not capable of surviving a first strike, but that we would retaliate with huge destruction with the other components.

I think the deterrent is no weaker for that and it would save us a lot of money and the hassle that has been going on for as long as I have been in this business.

Senator BIDEN. And if I read you correctly, it was "Triad/Schmiad," that was the name of the article I read.

Dr. BLECHMAN. That's right.

Senator BIDEN. You indicated that modernizing has more to do with the plans to fight a nuclear war than to deter a nuclear war—modernizing the ICBM's.

Dr. BLECHMAN. Right.

Senator BIDEN. I'd like each of you to comment on that and then I will let you all go to lunch. And I would submit in writing, if you are willing, about three or four more questions, if you would allow me to do that.

Dr. WARNER. As an ex-Air Force officer who worked for years on trying to make MX survivable, I have some vested interests here.

I believe "Triad/Schmiad" is the wrong argument. I believe that diversity is useful, and I believe that all three elements of our nuclear retaliatory forces ought to be as survivable as we can make them.

Having said that, I don't believe you can save the silo-based force. As you will note, I carefully did not state that was a reason I thought it was useful to stop the SS–18, because if it is not the SS–18, it will be the SS–24, or some submarine-based missile in the not too distant future, as the Soviet emulate, or at least match, our capability to be able to be highly accurate from the sea.

So, I think trying to save fixed silos, unless we would go back to a redundancy idea, is not a winner.

But, nevertheless, I do believe that it would be useful to have a versatile, flexible, and diverse force. So, I think we should be looking at the MX coming out of silos. That gives it better survivability under crisis conditions.

So, it is not more survivable. It is perhaps even marginally less survivable in the "bolt from the blue." But if you are willing to disperse the forces under crisis, then a very high degree of survivability would be attained.

I believe that the Midgetman II ought to be carefully examined, particularly in light of costcutting possibilities. Lightly MIRVing it, et cetera, has cut that cost over the last few years from the $40 billions down into the low $20 billions, and possibly less than $20 billion, depending on the size and character of the force you are looking for.

It is, quite simply, an argument for diversity and the different characteristics that each one contributes, and that has a lot to do with your faith in the relative survivability, invulnerability, of the other elements.

Submarines seem terrific. The numbers are likely to go down under START. They were going to go down without START from around 40 to around 20.

Senator BIDEN. The numbers are going down because of the Trident choice.

Dr. WARNER. The Trident choice. It is absolutely imbedded in the character of the Trident choice. That predated START, because the choice was there.

Senator BIDEN. I agree.

Dr. WARNER. Given all of that, I think it is a worthwhile prospect and a worthwhile venture to, in fact, restore a degree of survivability via mobility to our ICBM force.

Senator BIDEN. Dr. Larrabee.

Dr. LARRABEE. I agree. Just briefly, I completely agree with Ted. I think the issue is trying to retain a versatile or develop and retail a versatile, diverse, retaliatory force. The issue really is survivability, and mobility does allow that.

As he pointed out at the beginning, I think what you are trying to accomplish here and what we should be trying to accomplish is to have this type of force, which, in the end, means that, over the long run, the fixed-based silos are nonstarters, to a certain extent.

Dr. BLECHMAN. I think it is a matter of where you put the marginal dollar. If it were free, I'd have nothing against going to mobile ICBM's. But it's not free. And at a time when we are making deep inroads in the Navy tactical aircraft modernization program, where we have just killed the Marines' helicopter, where in the future we are going to make very real cuts in the defense budget and other types of forces, I do not think we can afford this added diversity in the strategic force.

I think there are more important priorities.

Senator BIDEN. One of which you mentioned, which is if we got to the point where we concluded that we wanted to reduce the number of submarines—that does not necessarily make them more vulnerable. If one is vulnerable, 38 are going to be vulnerable, or 20 are going to be vulnerable. So, reducing the number does not make them necessarily more vulnerable.

Dr. WARNER. It depends on what is the character of that threat. It is just how much faith do you have that they will always be invulnerable, whether there is one, or 30, or 50.

Senator BIDEN. Yes.

There is a followup question.

I now understand better, I think, Dr. Warner, why you believe that the present agreed-on structure, which requires the end of flight testing of the SS–18, does not solve your problem. Your argument is that doing away with the SS–18's does not directly relate to the question of survivability of our land-based system because you would argue they would move to others. There are other ways that it is vulnerable, not just because of the SS–18.

Am I right?

Dr. WARNER. Highly accurate ballistic missile RV's against fixed silos can be done by a variety of things, even by mobile missiles, as well as silo-based. But the SS–18 matters because of the barrage attack threat.

Senator BIDEN. Right.

Dr. WARNER. If you are going to go to mobiles, barrages become important. You cannot locate it specifically, but you can theoretically barrage a general area to destroy it.

Senator BIDEN. The importance of the elimination of the SS–18 increases if, in fact, you move from fixed to mobile. But if it stays fixed, it doesn't matter from your perspective.

Dr. WARNER. It also helps vis-a-vis bombers, bomber bases. A threat to bomber bases is not killing the bombers when they are on the base, but trying to barrage them as they are departing.

Senator BIDEN. Why does not the present structure of banning flight testing of SS–18's, the remaining 18's——

Dr. WARNER. It's not a flight test issue, Senator. The 18 issue is just plain dismantling.

Senator BIDEN. I understand that it is plain dismantling.

Dr. WARNER. It's been tested to death.

Senator BIDEN. I know it has been tested to death.

We have a proposal to include a ban on the flight tests of the SS–18; no?

Dr. WARNER. No. No flight test. Well, we may have, but then that would be an accuracy improvement issue.

Senator BIDEN. OK. Strike everything I just said.

Why would not an agreement, instead of eliminating, which I would love to do, all 18's—I'd like to take the 19's and there are a lot of other things that I'd like to take, too—but elimination of all the 18's is one proposal. How much do we get toward that goal if we, in fact, go to 154 and have an additional limitation of no further flight testing of the 18? How much does that get you?

Dr. WARNER. You get no benefits vis-a-vis this threat of barrage attack.

Senator BIDEN. The benefit is you don't have to test it anyway, in the future. They will continue to rely upon it.

Dr. WARNER. On the issue of whether you think flight testing is going to acquire a new capability——

Senator BIDEN. No, no.

Dr. WARNER [continuing]. Then there is no problem.

Senator BIDEN. I assume it only relates to whether or not 15 years from now, or 10 years from now, it will be deemed to be reliable.

Dr. WARNER. You can get a marginal improvement there. But in the barrage attacks, you are not relying on super high accuracy anyway. So, I doubt it would make much difference.

Senator BIDEN. Gentlemen, thanks a million.

I have roughly three questions that I would like to ask each of you. There is the linkage question that I asked the Secretary of Defense, and I would like to get your response to linkage. SNF and conventional, we have already spoken about that. Also there is linking of START and ABM, linking START and conventional.

I would like you to speak to those, and there are also a few other questions.

Again, I am really sorry to keep you this long, but I think your testimony has been really helpful to me, at least, and hopefully it will be to my colleagues.

You all state your positions so clearly and so well and I appreciate it very much.

Now, my real apology is to our last panel of witnesses.

We have Dr. Angelo Codevilla, senior research fellow at the Hoover Institution at Stanford University, and Dr. Steven Rose-

fielde, a professor of economics at the University of North Carolina at Chapel Hill.

You have been nice to sit here for so long, and while you are getting seated, I am going to stand and stretch.

[Pause.]

Senator BIDEN. I appreciate your taking the time to be with us today.

Doctor, would you please begin with your testimony, and then you, Dr. Rosefielde, and then we will get to our questions.

I will try not to keep you as long as I kept the others.

STATEMENT OF ANGELO M. CODEVILLA, SENIOR RESEARCH FELLOW, HOOVER INSTITUTION, STANFORD UNIVERSITY, STANFORD, CA

Dr. CODEVILLA. That's all right.

It's always pleasant to be back in the Senate. I spent 8 interesting years here, 8 fruitful years, so it is nice to be back.

Senator BIDEN. And you made a contribution, which we appreciate. We overlapped.

Dr. CODEVILLA. Indeed we did.

I am going to talk about why the next step in arms control is most likely to accelerate some longstanding trends that make war more likely and that would make it even less attractive to us than in the past, if that is possible.

There has been an awful lot of rhetoric associated with these matters and an awful lot of emersion in detail.

I am going to take a middle course. I am going to try to talk about strictly some important numbers, and I am going to, if possible, combine that with staying away from the details of treaties because, although I know there are lots and lots of devils in the details, Beelzebub himself is in the intentions, the military and political intentions that underlie treaties.

My basic point is this. For the past 20 years, the military justification for arms control has been that the Soviet Union is doing things that post a threat to not only our land-based forces, but, indeed, to all of our military forces, and that arms control will somehow keep that threat from happening, or will keep it from getting worse.

However, over the past 20 years, as we have undergone the arms control process, this threat has worsened considerably. The ratio between the number of Soviet counterforce warheads, a very special kind of warhead, to American strategic targets has worsened considerably, as has the ratio between the United States ability to damage the Soviet counterforce base and the Soviet Union's ability to damage the American counterforce base.

Each treaty seems to have ratified the U.S. acceptance of each step in the worsening of those ratios.

Now let me get to specifics.

The justification for SALT I was that it would stop the growth of the SS–9. The "image d'epinal" which drove us into SALT I was the fact that some 300 SS–9's existed. We had 1,000 Minutemen. By golly, if the Soviets ever got to 1,000, they could take out the Min-

uteman force, which was then more or less as it is now, one-half of our strategic target base.

So, the fear was that there would be a 1-to-2 warhead-to-target ratio.

Well, we signed the SALT Treaty and what happened? When Gerard Smith and Henry Kissinger came home, they assured everybody that all worries about counterforce had been eliminated forever and we would all live happily ever after.

A couple of years later it became undeniable to everybody that precisely what we had tried to keep from happening was happening, indeed in a far worse manner.

By the mid-1970's, it was clear that the Soviets would have the ability, by about 1980, of delivering about 4,000 counterforce warheads on the American target base. That is going from a ratio of 1-to-2 to 2-to-1.

Indeed, it became clear that the door was open for the Soviets to go far beyond that ratio.

If SALT II had any purpose whatsoever, any military purpose—of course it had lots of political purposes, as you know far better than I—but if it had any military purpose whatsoever, it was to keep this ratio from reaching its theoretical limits, which were somewhere around 13,000 counterforce warheads.

Well, of course, the Soviets did not do the worst that we had imagined. They stopped at about 6,500 counterforce warheads for a U.S. target base that had shrunk to slightly under 2,000. So, by the mid 1980's, we were looking at a counterforce ratio of a little worse than 3-to-1, from our perspective.

The other ratio remained about the same.

Now, we are deeply engaged, some think we have gone really most of the way, in the START negotiations. There is no military purpose, as far as I know, to the START negotiations on our side.

There is rhetoric about the general benefits to be gained by reducing nuclear warheads on both sides. However, there is every reason to believe—and I will outline what the reasons are—that the START Treaty will result in a Soviet counterforce warhead to American target ratio of about 10-to-1.

For a variety of reasons, as I say, this will be so.

First, the United States has more warheads than the Soviet Union in relatively few places; that is, in bombers and submarines. Therefore, we have too many eggs in too few baskets.

Besides, a growing proportion of their missiles are mobile; ours are fixed.

Second, the eggs-in-basket problem is serious for us and not for them because we are not going to strike first.

Third, a greater proportion of their warheads is of the prompt, counterforce warhead kind.

Hence, under START, the United States strategic target base is likely to drop to about 400, as against about 4,000 Soviet prompt counterforce warheads available to cover. So, we are going to jump from roughly a 3-to-1 ratio to a 10-to-1 ratio.

With that kind of ratio, it is difficult to talk about the damage expectation of the U.S. arsenal in a second strike. Even in a first strike, the United States arsenal, whose prompt counterforce component would be limited to about 500 MX warheads, would not be

terribly potent against a Soviet arsenal that would be substantially mobile.

So, the first-strike counterforce damage expectancy ratio would be in the range of 80 percent on the Soviet side to perhaps about 25 percent on our side—higher than ever, of course, on the Soviet side, but really no lower than ever on the American side, perhaps a tad higher than before.

This is to say that the incentive for a Soviet first strike would be higher than ever, especially if one takes into account that with no more than about 1,000 American warheads surviving a first strike, the ABM devices that are now being produced—and I'm not saying planned, but rather produced in the Soviet Union—would be far more meaningful.

An argument has been made that the Soviet ABM system is not terribly meaningful. Well, if you want to make it meaningful, just go through with START.

Notice that I have said that the various treaties effectively stopped the United States from doing this or that, and allowed the U.S.S.R. to do this or that. Of course, I have not been referring to the direct effects of legal provisions on both sides.

I have been referring to the direct effects of very different sets of military objectives on both sides, and, of course, to the direct effects of very different political systems.

Let me outline briefly what these effects have been.

For example, under SALT I, the United States could have built precisely the same kind of counterforce force that the Soviet Union built. It was legal for them to do it. They did not break the SALT I treaty in order to do what they did.

We could have done almost the same, and, because of miniaturization, perhaps the advantage in heavy missiles would not have meant so much for us. But we chose not to.

Under SALT II, nothing would have prevented the United States from having a force of 820 mobile MX missiles. That sure would have changed the strategic balance. It would have made for a very different balance than we have today, and it would be totally legal under SALT II.

But it did not happen—not because of any specific provisions of SALT II, but because of the reasons why we went into SALT II in the first place.

Under the INF Treaty, the United States could, for example, stuff Europe with SS–25-type missiles. It's perfectly legal. They're doing it. They're building SS–25's. We could do that, too. We could have them there. But we are not. We are not about to.

Under START, under the START limitation of roughly 5,000 warheads, the United States could theoretically have 5,000 mobile SS–25-type missiles, or, if you will, even Midgetman-type missiles. Indeed, we could have these things accompanied by devices very much like the Soviet SA–12, which, with a fair amount of information coming to them from the radars, like the Soviet Pechora class radars, would be really very good for preferential defense.

We could have an invulnerable force under START. But we are not going to have that.

Under START, the United States is likely to have 50 MX's, wholly immobile in day-to-day alert situations. This is even given

the so-called mobility of rail garrisons, which cannot be breached except in a crisis.

We would have about 150 bombers that will be vulnerable both to preemption and to Soviet defenses, and we'll have about a dozen Trident boats, half of which will be sitting ducks in ports at any given time, while each of the others will be the objective of the attentions of roughly one-sixth of the Soviet ASW fleet.

This U.S. force and the ratios that it implies is likely to happen not because the treaty will demand it specifically. It is likely to happen for the very same reasons that the earlier treaties resulted in the ratios that we have today.

Indeed, the ratios are likely going to be worse than the ones that I have just mentioned. It all depends on what we take the treaty as an excuse for doing or not doing.

As of now, it seems that the U.S. Government will take the next step in arms control as a kind of excuse for continuing to put war-fighting out of mind. This is a very effective way of dealing with the problem of war-fighting. It is, as Montaigne talked about, the way the average man deals with death. The remedy for death, of course, is putting it out of mind. He called it "Le remede du vulgaire."

Now, the only way to open the possibility that this would not happen would be to somehow couple the resolution of ratification of START with a kind of multiyear appropriation already passed by the House that would provide for the kind of force that would give the United States certain kinds of warheads with a certain kind of survivability.

But that is not terribly likely to happen because it would require taking the military situation very seriously. It would require looking at the Soviet force and saying what could they do, how could these people use what they've got to effectively fight against us?

If we did that, why the incentives for going forward with a treaty would be somewhat diminished.

There is no other way to ensure against an everworsening set of ratios. Verification is not going to do it. Verification after the INF model is a kind of tautology. We defined prohibited items in ways that allow circumvention. We restrict onsite inspection to a token of the places where the violations could be occurring. So, we can be certain that verification will turn up no violations and that the Soviets will do what they like—by the way, most likely without violation.

I emphasize, once again, that most, nearly all, of what they have achieved by way of worsening the ratios for us has been achieved very much within—within—the letter of the treaties.

Indeed, the primary significance of the violations is as a kind of slap. Because they are so relatively nonsignificant, it is a gratuitous acknowledgement of just how little they fear the U.S. Government.

As for compliance, if nothing else, it discredits the notion that arms control can make the Soviets do what they like. The lack of U.S. compliance policy certainly does.

I ask you to put yourself in the shoes of someone in the Kremlin who would argue that they ought to scrupulously comply with arms control agreements.

Imagine one of your colleagues telling you, "But Sascha, or Jozef, we can have our cake while eating theirs too. We have violated before. They have acknowledged it, we have acknowledged it, and they have come back simply to negotiate more treaties that push the ratios ever farther."

I don't have an answer to supply to that pro-American Soviet, and I wish that someone would point one out to me.

But someone may argue that none of this matters because "Gorbachev the Good" is making the Soviet Union into a peaceful power. There is surely an awful lot of action in the Soviet Union, and I don't know Gorbachev's mind any more than anyone else, and I don't know the future any more than anyone else.

But my old professor taught me that the more a situation is confused, the more we ought to pay attention to the hardest facts, like who has power and who does not.

So, in the tradition of contrarians, let me point out the following.

First, in the past 2 years, Gorbachev has reversed all of the devolution of power away from the top post in the Soviet Union that has occurred since 1953.

There is no more collegial leadership. There is no more sleepy feudalism. Officials are responsive to Gorbachev or they get purged. We have not seen quite this much power concentrated in the office of the General Secretary since Josef Stalin.

Maybe this is good.

Second, "glasnost" and "democrazia" should be perhaps used as transitive verbs. They are things that are done unto Gorbachev's enemies, not to his friends. They are clubs, sticks, with which Gorbachev is clobbering his opposition.

Gorbachev and his allies, especially, I will have you note, the KGB, have been immune to public criticism. You cannot practice glasnost in the Soviet Union without a license.

It is a kind of political warfare. As a Christian, I am very much for the opening of churches. But I will have you note that the way they have been opening churches is of somewhat ambiguous significance. The Soviet Union in the past year has opened 400 Orthodox churches in the western—I repeat, the western—Ukraine, where there is absolutely no call for them, where the population is very largely Catholic, and the Catholic Church is more repressed than ever. This, to my untutored mind, suggests political warfare, not a kind of pellmell opening.

Now, this political warfare may very well come a cropper. Gorbachev certainly has opened a lot of floodgates and a lot of turbulent waters are rushing through the levies. Who knows whether the levies he has set up will hold or not. Who knows whether and how the postdated checks that he is handing out will be redeemed. There is certainly an awful lot of discontent. An awful lot of people are trying out their wings and where this ends up, I don't know.

However, there is no doubt that certainly one objective of Gorbachev is to reestablish discipline.

As far as elections are concerned, again, I suggest that perhaps the people who were chosen to stand for election and those who were chosen not to stand for election were not chosen at random. Those who were chosen to have opposition and those who were chosen not to have opposition were not chosen at random.

So, one of these days Gorbachev is going to have to deal with increased demand for freedom. He is going to deal with it from a base of greater control of the apparatus.

No one can tell who will crack down on whom, or when, or what the results will be. Whatever happens, the Soviet Union will remain very short on butter, very long on people with very few scruples, and very, very long on guns.

What such people are going to do with the strategic force ratios that I have described I don't know. Alas, that is entirely up to them to decide, and not up to us.

Thank you.

[The prepared statement of Dr. Codevilla follows:]

PREPARED STATEMENT OF ANGELO M. CODEVILLA

If START is the answer, what is the question? What problem are you trying to fix? Is there any reason to believe that START will fix it rather than make the problem worse?

I ask these first-order questions because I see precious little evidence that either the Executive branch or the Senate has dealt with them, and instead have plunged into, on the one hand the details of the negotiations, and on the other hand the familiar round of public statements designed to make sure that everyone understands the speaker to be at least as peace-loving as the Soviet leaders. I remind you that both negotiating details and political statements are meaningful only in the larger context of world's evolving military-political balance. Even at this stage of negotiations the START treaty, like other agreements before it, shapes the real military correlation of forces in the world in ways that are not primarily related to the details of the treaties. There are indeed a host of military devils in the details. But Beelzebub himself is in the military strategy which underlies each side's approach. For example, both sides adhered to the details of SALT I. But the fundamental differences in strategy literally changed the world. On the political side also, arms control agreements produce winners and losers. Politicians who thought they had struck a fine pose while signing or ratifying a treaty one year have found the next year that a political situation has arisen in which they look like warmongers. For example, those who championed the INF treaty's removal of Pershing IIs and GLCMs from Europe have made themselves the targets of a much more potent political drive against those American nuclear forces that remain in Europe. So my general point is: look carefully at the fundamentals of START lest you seriously weaken your country while at the same time feeding political trends that will make life even harder for you.*

I will begin here by describing the basic military problem which American arms controllers have tried to ameliorate for the past 20 years,

---

*This statement is an overview. For supporting materials see Senator Malcolm Wallop and Angelo Codevilla The Arms Control Delusion, San Francisco, ICS Press, 1988.

namely the Soviet Union's growing capacity for a strategic first-strike. There is no disagreement that the problem has become worse. I will argue that this is not despite all the arms control agreements we have had, but because of them. My argument, by the way, has next to nothing to do with Soviet violations. Then I will show that perhaps the most harmful effect of the arms control process has been to prevent both the Executive and Legislative branches from paying due attention to basic military questions. Finally, I will show how the looming START agreement is following in the footsteps of previous agreements and is virtually cetain to leave the country worse off both militarily and politically.

1. The Soviet problem and the arms control solution

Twenty years ago the wise men of the land perceived the unlikely possibility that the Soviet Union might not regard nuclear war as the meaningless annihilation of mankind but might be preparing to fight, survive and win. Of course they rejected the possiblility, but nevertheless they noted that the Soviets were building SS-9 missiles, each of which had the capacity of destroying a Minuteman silo. By 1971 they had 300. The nightmare was that they would build over 1000 and achieve the capacity of placing one counterforce warhead on every U.S. strategic target.

So the Best and the Brightest devised a solution. Both we and the Soviets would solemnly pledge not to build strategic weapons capable of destroying each others' strategic weapons. Each of us would build only weapons optimized for killing defenseless civilians. Both of us would refrain from defending against each others' missiles. All would live happily ever after. The Best and the Brightest embodied this grand design in two treaties signed in Moscow on May 25, 1972. The treaties were full of definitions that to untrained observers seemed either circular or unrelated to the purpose of banning counterforce missiles and ensuring mutual vulnerability. But the Best and the Brightest said, and the Senate gravely agreed that the size and number of silos were verifiable and that this would cap the number of SS-9s, and also that the number of ABM radars and interceptors deployed were verifiable, and that this would ensure that the Soviets did not steal a march from us in that field. The statements of the Best and the Brightest in 1972 reflect the assurance of a major epochal

accomplishment. Thus Gerard Smith: "When you think of the concerns that we have had for the last 25 years about first strike and counterforce, it seems to me a general recognition by both countries that they are not going to field a nationwide system is of first importance politically, psychologically and militarily." The problem was solved. There would never be more than 300 Soviet counterforce weapons ranged against some 2000 American strategic targets—about one to six—and hence there would never be a serious temptation for the first strike, forevermore.

Forever did not last long. By 1975 it was obvious that the Soviets were going to build an arsenal of counterforce weapons with far more built-in incentives for the first strike than the force which the Best and the Brightest thought they had banned at SALT I. By 1979, through straightforward long-foreshadowed advances in accuracy and miniaturization the Soviets' fourth generation of ICBMs became capable of launching some 4000 counterforce warheads. The ratio became two Soviet special warhead to one American strategic target. Most significantly for arms control, all of this happened totally within the letter of the SALT I. And it was only the beginning.

Some American arms controllers were embarrassed. But evidently not enough. They engineered the SALT II treaty. But they never said very clearly what good SALT II would do. Insofar as SALT II had a purpose other than arms control for its own sake it was to limit the damage done to U.S. security by SALT I—to keep the ratio between Soviet counterforce warheads and U.S. targets from getting worse. To this end SALT II contained about 20 times the definitional language of SALT I. But again the definitions did not effectively grasp or comprehend the problem. They did not deal with the production of either missiles or warheads. As regards testing, and given the nature of U.S. intelligence, they dealt not with warheads but with release maneuvers from PBVs. Also, a missile could be new in every way, but "old" for purposes of SALT II. So, even assuming perfect Soviet adherence to SALT II and its counting rules, the Soviets could have built some 13,500 counterforce warheads against our strategic targets—still only about 2000, and still fixed. As of today, thanks to strategy, economics and technology, but no thanks to SALT II, the Soviets have only about 6500 counterforce warheads. This is a ratio of over 3 to 1.

Contrast this with our forces. Today, with 50 MXs on line, there are 500 true, prompt counterforce warheads ranged against about 4000 Soviet strategic targets. Minuteman IIIs are in a much lower category of effectiveness. So this is a ratio of one to eight.

But please note that SALT II is not the final culprit for all this. SALT II allowed the U.S. to do just about everything that it allowed the Soviets. Under SALT II we could have 820 fully mobile MXs and 320 Trident IIs for a total of over 13000 secure, counterforce warheads. This would give to us, rather than to them, a 3 to 1 weapons to target ratio. But we don't have such a force. Some members of this committee who are quite content with Gorbachev having that ratio against us would not be comfortable at all with our having that ratio against the Soviet Union. Hence U.S. military strategy is not to have a counterforce capacity against the Soviet Union. What is U.S. strategy then? To say "deterrence" is to beg the question: What does it take to deter? The Soviet Union knows what it takes to deter us: counterforce combined with strategic defense. But the U.S. government seems to have no answer. It has been wrestling inconclusively with this question for twenty years, and the thought process seems less coherent than ever.

Note for example the last two issues of the Secretary of Defense's Posture statement. They describe the Soviet Union's ever increasing capacity to destroy our strategic forces and to remove more and more of its target base from the threat of retaliation. The statements note that "left unchallenged" these trends are destroying deterrence. But these same statements outline no programs to effectively challenge these trends. The statements speak of "holding at risk" those assets that the Soviets value most. This after having just described our increasing inability to hold at risk precisely those assets. This is not serious thinking.

Perhaps the most powerful reason for the sterility of U.S. strategic thinking is the hope that arms control will somehow reduce the threat. But neither U.S. arms control thinking nor U.S. arms control practice seem capable of doing that.

First consider our arms control objectives in the 1980s. Are they still what they were in 1972 or are they something else? That is anything but clear. If they are what they were in 1972, i.e. to make sure that both

we and the Soviets lack the capacity to attack each others' weapons while retaining an unchallenged capacity to destroy each others' cities, then we must acknowledge that they are unacceptable politically and completely out of reach militarily. Politically, it would be interesting to see anyone running for office in this country foursquare on the platform of perpetual vulnerability for the American people. Militarily, it could not be plainer that the Soviet Union has an approach to strategic power that is diametrically different from the expectations of classical U.S. arms control, namely to maximize their counterforce warhead-to-target ratio and to decrease the vulnerability of Soviet society, starting with the party-state control apparatus. Now please note the fact that through the tangle of the past decade's arms control rhetoric, proposals and counterproposals, negotiations, treaties, understandings and the like, one trend has continued straight and true: the number of Soviet warheads capable of destroying each U.S. strategic target on a time-urgent basis has continued to grow. Thus also strickly military incentive for a Soviet first strike has grown.

Why is the Executive branch satisfied to continue the arms control process that helps drive this trend? Why are the Senators on the Foreign Relations Committee willing to continue the arms control process that helps drive this trend? Does anyone have any reason to believe that anyone in the Soviet leadership opposes this trend? What is the evidence? What reason is there to believe that the Soviet Union's newer weapons are going to be less oriented toward warfighting than its older ones? In fact the new ones are betterfor warfighting than the old because the Soviets want them to be. What reason is there to believe that as the Soviets' capacity for self-protection increases their desire for it will wane? What powerful potion do START negotiators have that will make into reality the hopes that U.S. arms control negotiators have had of the Soviets, and will finally establish the world that U.S. negotiators thought they had established in 1972?

Or perhaps the START negotiators are pursuing a different agenda. Is our negotiators' objective the opposite of mutual vulnerability? Do they really mean to limit the number of offensive weapons so that both sides can more easily build effective defenses? Do they really believe that the

Soviets are agreeable to this agenda? If they do, how do we take into account the fact that the Soviets have insisted that reductions in strategic weapons are entirely conditioned on our continuing to deprive ourselves of any anti-missile defenses? If we agree to that demand in any way shape or form, what can we say about our real objectives.

2. The START Solution

Now let us see what the tools available for a START treaty are capable of producing.

The agreed draft of START leaves each side with some 5000 warheads on 1500 missiles or bombers. Assume for a moment that the Soviets would have only the warheads and missiles they would declare--that they would not cheat. Who will bet against the proposition that most if not all of these Soviet warheads will be optimized for counterforce? Assume that 4000 will be so optimized. The quesiton now becomes: Into how many baskets will the United States' strategic eggs be divided? And how vulnerable will each of them be?

At one extreme, we can imagine our allotted 5000 warheads sitting on an equal number of single-warhead, fully-mobile missiles, unpredictably cruising the highways and byways of our country, their location known only to the computers of an American anti-missile system that would intercept any Soviet warhead that was heading for any of them. In this extreme case the Soviet incentive for a first strike would be less than zero. Even using every warhead in their arsenal they could not hope to cripple ours. At the other extreme, we can imagine our current forces, pared down: 50 MXs, perhaps 150 bombers, and 12 Trident submarines, six of which would be in port at any given time. Together with command and control systems, our strategic forces would amount to fewer than 400 aim points. Unfortunately, factors both intrinsic and extrinsic to the treaty are likely to make reality closer to the second extreme.

The treaty is most likely to negate the mobility of U.S. land-based missiles. They will not be allowed to disperse from their garrisons in day-to-day situations. This means that there would be enormous pressure in a crisis to keep them still, lest their movement be seen as tantamount to a decision to go to war. Given such bogus mobility, our current vulnerable fixed silos are safer. The submarines in port would not stand a chance.

Those bombers which escaped, and their cruise missiles, would have to take their chances with the Soviet air defense system. The half-dozen Trident boats at sea would each be hunted by potentially 30 Soviet subs.

Given all of this how many American warheads would be available to launch? At what would we launch them? To accomplish what? As you consider these questions think about the growing Soviet anti-missile system. Many of the interceptors around Moscow intercept at high altitudes, and hence have huge protective footprints. Some already have the HOE optical guidance system developed for SDI and stolen as part of the Harper case. Then ask how many interceptors are in the 100 silos around Moscow? How fast can they be fined? How many SA-12 mobile, dual-purpose defensive systems are the Soviets producing? How useful is the network of Pechora class radars in helping the SA-12 intercept incoming warheads? The answer to all these questions is that however marginal the Soviet antimissile system had been before, the most likely deployments of U.S. strategic forces under START would be so vulnerable and their capacity to deliver a retaliatory strike so weakened that the Soviet anti-missile system would become very useful indeed.

Thus the net effect of START is likely to be a massive acceleration in the twenty year trend that has been diminishing the relative deterring power of U.S. strategic forces and increasing the incentive for the Soviet Union to start
a war.

Of course how we shape our forces is up to us. But several factors extrinsic to the treaty work against our doing the job right. First, in order not to upset their budgets, in order to comply with arms control policy, and in order to keep up appearances, the military services will provide exaggerated best-case assumptions of what targets U.S. START-limited forces could cover in a retaliatory strike. If you look closely you will see that these estimates assume that the B-1 will survive and penetrate, that the B-2 will be built, that just about all our land-based ICBMs will be launched under attack, and that Soviet anti-submarine warfare is nonexistent. Then look carefully at the bottom line of these estimates. You will see that even with best-case assumptions the Soviet Union will still have a wide edge in military damage expectancy.

As soon as one begins to factor reality into these estimates—for example, the Soviet Union's 10 warheads missiles would not be vulnerable to retaliation because they would surely be fired in a first strike—the comparative second strike damage expectancy figures look a lot worse. Whoever thinks this is acceptable should make his case openly.

Again, START does not force us to put ourselves at a strategic disadvantage. We could simply deal with Soviet strategic forces on their own terms. That would require both a high degree of day-to-day mobility on the part of our offensive forces and significant American anti-missile defenses. Both mobility and defense are especially important to us because we will not strike first. Nevertheless it is the Soviets, not we, who are well ahead in both fields. Surely if their objective were anything other than bettering their already excellent warhead to target ratio they would go along. But they won't. Could it be because they are really worried that truly mobile U.S. missiles would evade verification and Congress would covertly authorize more missiles than allowed by the treaty? Such arguments are not serious. No. The Soviets really and truly want the better warhead to target ratio that START will almost surely give them. It would be difficult to understand why American negotiators cannot figure that out, if they had not built up such a consistent of letting the Soviets build up that deadly ratio in the past. If we were militarily serious today, we would not consent to yet one more jump in the ratio--especially since we don't have to—even under START.

As I have already mentioned, START should not prevent us from building a force composed primarily of missiles much like the Soviet SS-25. But how would anyone who is already committed to arms control explain to the American people the need to spend many billions to wholly reshape U.S. strategic forces? The only reasonable reason for building such a force is to guard against a Soviet Union that is ready, willing and able to make war on us? But if the Soviet Union were seeking to gain a war-winning edge on us why would we be signing an arms control agreement with it?

If the President and the U.S. Senate judge the Soviet Unionto be a worthy partner in START they can only do so by wholly rejecting the logic inherent in Soviet military forces and the logic required to oppose them. That decision, for more than the terms of the treaty, will drive U.S.

forces toward relative insignificance. Thus to accept START is not so much to accept a fixed military situation as it is to accept a dynamic one—an acceleration of the trend. Many Americans long for a final solution to strategic problems—a fix forever. But the Soviets have basically renewed their strategic forces every ten years, regardless of arms control. It is a safe bet they will not stop in the future. But with us arms control agreements are attractive primarily as a reason to stop. It is difficult to imagine a worse place for us to stop than with a Soviet 10 to 1 warhead to target ratio against us.

3. Things could be even worse, however. The Soviets could cheat, let us see how attractive cheating would be, and how little we could do to dissuade them from cheating.

First, the experience of INF should have left few illusions about the benefits of finely-crafted provisions for on-site inspection. We defined the prohibited system, and the locations and modalities of inspection, so carefully that we in effect constructed an airtight door--but one that stands by itself in the middle of a desert. To get what they want under INF, the Soviets need not bash down the door— only go around it. The INF treaty bans the SS-20, but allows full production of the SS-25. Putting a 3-warhead package on the SS-25to firing at European targets is easy. So why would the Soviets cheat on the INF treaty—and if they did, why would they do it at the one and only factory we are allowed to inspect? But why should we take comfort in that?

In START, our negotiators are trying to define which factories may be looked at in what ways. If we sign and ratisy START we can be sure that inspections of this kind will find no violations. But let us be serious. To know about the quantity and quality of modern mobile missiles and modern anti-missile equipment produced in the USSR with the same degree of confidence with which the Soviets get comparable information about U.S. systems the Soviet Union would have to become as open a society as ours—a society where whistle-blowers are prized rather than executed. The beginning of seriousness on our side about verification would be the recognition that the problem is asymmetrical. Of course, if and when the Soviet Union becomes an open society, we won't need arms control.

Seriousness also requires recognition of the fact that given low levels

of offensive weaponry, cheating becomes much more attractive. Defensive weapons also become much more attractive. Here it is essential to remember that arms control definitions traditionally help to mask the acquisition of useful military systems. For example, we have made a huge fuss about the Krasnoyork radar because it violates the ABM treaty. But this radar is only a small part of much larger Soviet anti-missile preparations that do not violate the treaty. The other eight Pechora class radars, full production of Flat Twins, Pawn Shop radars, SH-11s, SH-8s, SA-12s are all certifiable nonviolations. But they are militarily important now and would be militarily even more important under START. The point here is that, today as in the 70s, when the Soviets built a counterforce ansenal while we were carefully measuring the number and diameters of silos, verification of the terms of a treaty would serve to focus attention away from military reality.

Finally let me ask you what might possibly deter the Soviet Union from pursuing the maximum military power under START by exploiting American quiescence, by circumvention, and even by outright violation? Put yourselves in the shoes of someone in the Kremlin who would be arguing against a plan to exploit or violate the treaty. His opponents might well say: "But Sasha, what do we have to lose? If the Americans find out, they will be reluctant to say they made a mistake in signing the treaty. This has happened before, and each time they have come back and signed another one that has given us even better ratios—They even continue to subsidize wheat sales to us. Look Sasha. We can have the benefits of the treaty and the benefits of not having one. We can have our cake while eating theirs." What arguements would poor Sasha have? Perhaps this distinguished committee can think of some.

Senator BIDEN. Thank you very much, Doctor.

Dr. Rosefielde, before you begin, may I just suggest we take a 1-minute break while I make a quick call to my office.

We will recess for 1 minute.

[A brief recess was taken.]

Senator BIDEN. I had an ulterior motive for the break. The hearing room is supposed to have a totally different hearing begin at 2 o'clock.

As you know, Doctor, negotiating these critical issues, like who is entitled to be in what room, becomes important sometimes.

At any rate, thank you for allowing me that break.

Dr. Rosefielde, if you would, proceed with your statement, please.

STATEMENT OF STEVEN ROSEFIELDE, PROFESSOR OF ECONOMICS, UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL, NC

Dr. ROSEFIELDE. Senator Biden, thank you, and I thank the rest of the committee for inviting me to testify today. It is an honor to be here.

Senator BIDEN. It is a pleasure to have you.

Dr. ROSEFIELDE. I have prepared a statement, and I brought with me several papers, scholarly papers, that I have written on these general subjects, which I would like to submit for the record.

Senator BIDEN. Without objection, they will be inserted into the record as if read.

Dr. ROSEFIELDE. I will be speaking today on two types of issues, one related to national security questions, and the other related to Soviet economics.

My credentials, briefly, are that I have worked with the Soviets for more than 10 years at the Central Economics and Mathematics Institute, initially under the science and technology agreements signed between Brezhnev and Nixon on the problem of the applications of computers and mathematical methods to Soviet and American management.

I am also on the editorial board of Orbis, and I am on the executive committee of the Atlantic Economic Society.

The topic, as I have understood it, the task that has been assigned to me is to discuss the possibilities for improving bilateral relations between the United States and the Soviet Union in the years ahead without impairing deterrence and without compromising the stability of our national security relationship.

In order to evaluate this kind of matter, I find that it is useful to revert or refer to the statistical record. The Soviet Union has, for a very long time, had what is called a "dual-track" national security strategy. In their dual-track strategy, they have not single-mindedly emphasized the use or threat of use of military force, but they have combined this approach with diplomatic and other related measures.

The purpose of a flexible strategy is to proceed along without conflict, insofar as possible, waiting for targets of opportunity to arise.

With the advent of, First Secretary, and now, President, Gorbachev, many people have come to believe that there has been a fundamental change in Soviet national security objectives; in essence, that the Soviets have either abandoned or radically modified their dual-track strategy, and, as a consequence, that it's possible for the United States and the West generally to move forward safely toward a more amicable relationship.

What I will be telling you today is that in some areas it is prudent, wise, and appropriate to move ahead in improving our bilateral relationships with the Soviets; but in other areas, caution, extreme caution, is required, because, in essence, there is no strong evidence to suggest that the Soviets have altered their dual-track national security strategy.

As evidence to support this contention, let me draw your attention to Soviet weapons production data.

In my testimony, on table I, you will see data provided by the Defense Intelligence Agency on Soviet weapons production over the period 1977 to 1985—these are cumulative statistics—and data for more recent years, 1986 and 1988.

These data demonstrate incontrovertibly, I believe, that the Soviets have outproduced the United States in almost all weapons categories by enormous margins. For example, for the period 1977 to 1988, the Soviet Union produced 1,720 intercontinental ballistic missiles, whereas the United States produced a total of 95.

In the area of tanks, the Soviets produced 24,400; the United States produced 7,300.

These are the historical, the cumulative, disparities over the recent past. What has been the record in recent years under President Gorbachev's watch?

In 1986, the Soviet Union produced, on average, precisely the same number of strategic weapon systems, precisely the same number of tanks, that it had on an annual basis during the preceding decade.

More recently, in 1988, after President Gorbachev has had an opportunity to consolidate his authority, the Soviets have markedly increased their production of these weapons over the preceding annual rates.

The Soviets, in 1988, looking in comparison with the average for the period 1977 to 1985, produced 25 percent more strategic ballistic missile weapons.

During that same period, the Soviet Union produced 40 percent more tanks on an annualized basis.

I would submit to you, Senator Biden, that this behavior is inconsistent with the declaratory policy of "new thinking" and has to be taken as a cautionary warning that there may be a very substantial disparity between what Gorbachev has stated is his new, peaceful foreign policy and what he may, in fact, be intending.

Let me proceed along these same lines by reminding you that the Soviet defense burden, understood here as the share of the gross national product devoted to military activities in the Soviet Union is enormous. It is, at a minimum, three times that of the United States.

Senator BIDEN. That would make it a minimum of 18 percent?

Dr. ROSEFIELDE. It would make it a minimum of 18 percent.

That is my estimate of it. Let me tell you that the revised CIA estimate runs 15 to 25 percent on these figures.

You have heard that Shevardnadze leaked that the figure was 19 percent of Soviet GNP. Perhaps later we can chat about these specific numbers.

The important point, though, is that the Soviets, as of yet, have not shown any signs of curtailing their defense expenditure activities when they have gone to great lengths to proclaim the necessity of doing so in order to successfully achieve their goals of perestroika.

When you are spending sums of these magnitudes—adjusted for the scale of the U.S. gross national product, it comes down to a sixfold effort, compared to the U.S. effort—there is enormous opportunity for cutbacks, and we have not seen them.

I take that as a second element of caution in trying to evaluate the national security environment that we may face in the years ahead.

Now, Senator Biden, the Soviets certainly have announced and may well be making some changes in their force structure. First Secretary Gorbachev has announced that he will be withdrawing 50,000 troops from Europe and that he will be demobilizing 500,000 soldiers from the Soviet Armed Forces.

He may well do this. But the evidence suggests that, at the very same time that he is reducing outlays on manpower, he is expanding investment in modernization, particularly in the areas of high technology.

This strategy, I would like to call to your attention, has been seen before. During the period of Nikita Sergeyevich Khrushchev, from 1955 to 1960, the Soviets reduced their manpower expenditures at 2 percent per annum. At the very same time, they were increasing their modernization, their expenditures on procurement, in excess of 20 percent per annum.

Now, one has to, I think, pay attention to this precedent of the past because it could easily imply that, while the Soviets may well make gestures today or tomorrow, which reduce their defense spending, in the aggregate, they are doing so in a way that will provide them with a much more powerful and much more dangerous force structure in the future.

The Soviets do not need the state of readiness today that they needed in the past because Gorbachev has been successful in creating an amicable climate. But this may be something of a ploy.

Now, earlier on in the discussion today——

Senator BIDEN. Doctor, I hate to ask you this, but about how much longer is your opening statement, because we are about to lose this room. They are, literally, going to have us end the hearing in the next 9 minutes.

Dr. ROSEFIELDE. May I have about 8 minutes of that time, then?

Senator BIDEN. Yes, sure.

Dr. ROSEFIELDE. I'm sorry that it's worked out in this manner.

Senator BIDEN. That's all right.

Dr. ROSEFIELDE. I will try to speed up.

It seems to me, Senator Biden, that there are many other indications that the Soviets may not be entirely sincere in all of the gestures that they are making with regard to new thinking. They may very well be treating treaties as contracts as convenience.

We saw earlier in today's talk Secretary McNamara mentioned that the Soviets made a blunder when they tried to suggest that they would back out of the INF Treaty.

I personally think that this is not so much a blunder as it is an example of revealed preference; that the Soviets see the treaty process as an opportunity to enhance, turn the correlation of forces, to use their jargon, to their own advantage; and, when it suits their convenience, they will back out of their treaties.

In the same vein, let me mention the very disturbing loopholes that appear to exist in the INF Treaty and the START Treaty, as it is being negotiated, with respect to nondeployed ballistic missiles. There is a whole area of weapons which are simply not covered and not controlled by the agreements, merely because they are being

held off designated bases, and the possibilities here for deception, for breakout, are very significant.

I will remind you that Congressman Les Aspin held a hearing last year, published a document on May 22, 1988, called "Breakout, Verification, and Force Structure—The Implications of START," in which he showed, under what he felt was a worst-case scenario, that the Soviets would wind up with a fourfold advantage over the United States in deliverable nuclear weapons under the terms of the agreement.

Again, this is a warning signal, to me, to proceed extremely cautiously.

Steve Larrabee mentioned today that the Soviets might cut back their troops, from 5.2 to 4.2 million in the years ahead. The latter figure is the one reported by Gorbachev. His figure was the Central Intelligence Agency's figure.

The Soviets have taken an affirmative position. They have given the appearance of revealing truthful information about their military capacities. And yet, when we go to check on what they are doing, we find that there is a disparity.

CIA manpower estimates are, roughly, 25 percent higher than Gorbachev's estimates.

With regard to the reduction of tanks, Gorbachev promised to reduce 10,250 tanks in the years ahead. But at the annual rates of producing, he will produce 10,500 advanced tanks to replace them by the time they are being withdrawn from the Warsaw Pact areas.

So, again, all of these cautionary matters are at hand.

Now, let me turn briefly to the economic side of the matter and change hats and speak as a specialist in this area.

The Soviet economy is a dual economy. The productivity structure of the military machinebuilding sector, the weapons sector, in the Soviet Union is extremely higher than in the rest of the economy. It is not difficult for the Soviets to maintain their arms buildup. It is not difficult for the Soviets to sustain their force structure, and it, therefore, is a mistake to assume that Gorbachev must churn guns into butter in order somehow to achieve a satisfactory transformation to perestroika.

Let me give you just a few statistics about this.

In table III in my statement, the table demonstrates that the rate of productivity growth in the Soviet weapons sector is the fastest in the economy. If the Soviets added no additional resources—no additional capital, no additional labor—they would be able to produce roughly 5 percent more per year, in terms of their weaponry.

Why is this the case? Because the lion's share of Soviet R&D activities are focused in the military machinebuilding sector—not just on the weapons, but in the capital stock to produce those weapons. They are able to enhance and improve the productivity of this sector and that needs to be known.

Likewise, it is often said that the Soviet economy is in a crisis, that it is on the verge of collapse, and, as a consequence, the Soviets will be required in the very near future to curtail their military activities.

In table II, Senator Biden, I report statistics for you which are provided both from official Soviet sources and from the Central Intelligence Agency.

These figures indicate that in the years ahead, the Soviet economy is likely to grow between 1 and 4 percent per annum. It really does not make any difference what the exact number is. So long as the Soviet economy is able to muddle through and move ahead at modest, but positive, rates of growth, they are not under any inexorable requirement to reduce their military expenditures.

Indeed, as I have sometimes pointed out to others before, because the military machinebuilding sector is so vastly more productive than the civilian sector, if the Soviets do transfer resources out of the military sector into the civilian sector, as Gorbachev has said he will do, they will discover that their gross national product may very well decline, because they will be taking resources from the component of the economy that is most productive and transferring them to the one component of their economy that we know is a failure, that is, their civilian consumer goods subeconomy.

With only 1 or 2 minutes left, let me speed on to——

Senator BIDEN. Let me clear that I am not trying to rush you. We have given you twice as much time as the other witnesses because you waited so long, and I am delighted to hear it. I don't mean to rush you. We are not going to get a chance to ask questions, but that is OK.

Dr. ROSEFIELDE. Thank you.

Now, the issue of perestroika is relevant here. The question is whether or not Gorbachev's radical economic reforms will somehow be able to improve the performance of the Soviet economy in the years ahead. For brevity, let me state for the record along with most specialists in the field that there has been very little meaningful perestroika, very little radical economic reform in the Soviet Union.

Gorbachev has promised on numerous occasions to introduce competitive flexible pricing; he has made no effort to do so. He has announced that he has detached the central planning apparatus from enterprise decisionmaking, he has effectively decentralized the economy; he has, in fact, done virtually nothing in that regard.

As a consequence, one should predict in the years ahead that the Soviet economy will perform much the same as it has in the recent past.

Now, this decision on Gorbachev's part has been discretionary. It can be shown on a technical basis that the Soviet economy can be radically reformed; that it is possible to significantly improve the performance of the Soviet economy.

What is required is the reduction of barriers to entry on the supply side; that is, allowing firms to compete with one another and to move across sectors where profitability dictates.

Likewise, it requires permitting consumer preferences to have an impact on the structure of supply. Gorbachev can do this, but has chosen not to because, in effect, he has decided that it is better to maintain the control of the state and the Communist Party over the economy than to allow the economic mechanism to function in a way that would improve the welfare of the Soviet people.

In conclusion, Senator Biden, let me say for the record that I believe there are many areas in which the United States and the West can improve bilateral relations with the Soviets. We can engage in constructive negotiations, constructive discussions, about ruble convertibility, about integrating the Soviet Union into the world economy, about their possible participation in the INF, in the World Bank, in other multinational organizations.

There are many other political opportunities that are available for doing so.

It strikes me, though, that while we may go ahead and proceed energetically in these areas, we should be extremely cautious with respect to arms control and disarmament. It is in the area of arms control and disarmament that the United States and the West could find itself entering into treaties which appear, on the surface, to be fair and equivalent, which, in effect, when the loopholes are taken into account, are highly disadvantageous to us, degrade deterrence, and increase the prospects for destabilization of national security relations.

Thank you, Senator.

[The prepared statement of Dr. Rosefielde follows:]

PREPARED STATEMENT OF STEVEN ROSEFIELDE

Mikhail Gorbachev has captured the imagination of the international intellectual community with his candor, energy, vision and charismatic rhetoric. He has championed partial democratization (demokratizatsiia) and inveighed against some aspects of authoritarianism. He has explicitly repudiated the command paradigm in favor of a controlled market system, and has made consumer welfare the centerpiece of his ambitious programs for socioeconomic reconstruction.[1] These initiatives have had a profound impact on scholarly assessments of Soviet reform potential across the political spectrum. Optimists understandably are elated,[2] but even those who have tended to see the Soviet Union as an intransigently authoritarian regime have begun to have second thoughts.[3]

It is appropriate at this juncture therefore to consider whether the substantive aspects of Gorbachev's industrial reforms are consistent with his radical rhetoric and justify the spectral shift in informed expectations. More precisely is it reasonable to suppose that the deficiencies of the Soviet economic system have persuaded Gorbachev that he must abandon traditional Soviet authoritarian goals and the economic mechanism sustaining them in order to build a viable liberal, democratic socialist economic order?[4] This essay attempts to unravel this enigma. The task is a difficult one because Gorbachev's radical industrial reform program is underspecified. Instead of a single model, his initiatives are compatible with diverse regimes, each exhibiting its own unique characteristics. Nonetheless, it will be shown on technical grounds that Gorbachev neither has to, nor has chosen to radically transform prevailing Soviet economic arrangements. Careful analysis reveals that the program he has adopted is a conservative, state-directed market scheme, with some liberal aspects[5] that will primarily benefit the investment and armaments sectors. The strategy will not allow the Soviets to attain a standard of living commensurate with that of the developed West, but it does offer the leadership an opportunity to realize some market efficiencies without ceding authoritarian control.

The industrial reform program that is the object of our concern is officially heralded in the Soviet literature as "radical." This term could merely signify that Gorbachev's program is extraordinarily ambitious, and that he seeks primarily to make a superior system better.

Gorbachev however has adopted a more provocative posture. He has flatly asserted that the Soviet economy was in, or was approaching a state of "pre-crisis" which could end

catastrophically unless prevailing arrangements (were) are exhaustively overhauled.[6] He contends that the economy is stagnating, that technology is lagging, that administrative authorities intervene excessively in enterprise management, that managers suppress worker initiative, and that decisionmakers at all levels are continuously making the wrong economic choices because they operate with faulty indicators and are unresponsive to legitimate purchasers' demands.[7] Half measures under these circumstances he asserts will not suffice. Only a radical industrial reform can restore the global competitiveness of the Soviet Union and international socialism.

The Radical Alternative

The deficiencies besetting the Soviet economy, Gorbachev maintains, are rooted in the command paradigm; an economic system founded on command-administrative methods and centrally planning that is the economic counterpart of the authoritarian/totalitarian political control model.[8] The radical alternative elaborated in Gorbachev's writings retains some of these elements, but is founded on individual/collective initiative, decentralized goal maximizing and the satisfaction of consumer demand.[9] It is a centrally regulated, indicatively planned, competitive market system that rewards worker exertion, cooperative entrepreneurship, innovation, productivity, efficiency and growth without incurring significant capitalist market generated losses such as massive involuntary unemployment, price instability and worker exploitation.

Gorbachev's claims that this vision of market socialism can be achieved by means of a few simple, but pathbreaking reforms. First and foremost, the command paradigm purportedly is to be cast aside by abolishing (curtailing) central directive planning and resource rationing.[10] Responsibility for formulating one year plans will be devolved from the State Planning Agency (Gosplan) to the enterprises which will acquire their inputs by direct contracting, instead of wholesale rationing through the Material Technical Supply Agency (Gossnab).[11] Ministries will be enjoined from interfering in enterprise planning and operations, and Gosplan's charter has been rewritten so that its principal declarative task is the elaboration of long term indicative plans. The focus of the new regime is the enterprise and its relationships with suppliers and purchasers. Managers and worker collectives are to be granted expanded discretionary latitude over all aspects of production. They will be guided in their endeavors by an improved system of indicators, liberalized material incentives and by a comprehensive revision of wholesale and retail

prices.[12] Production will be largely for profit, and rewards will be consistently tied to this success criterion.

Contracting among suppliers and purchasers likewise will be animated by the profit motive. Principals will be encouraged to negotiate all aspects of production and exchange, and will even be permitted to mutually determine selected prices that have yet to be specified.[13] They will be assisted in these regards by newly created State wholesale trading companies operating for profit on a self-financing (khozraschyot) basis, and by a revised set of enterprise statutes.[14]

Successful firms will be permitted to reinvest a portion of their profits on a self directed basis facilitating their expansion,[15] while those that cannot pass the competitive test will be forced into bankruptcy.[16] It is anticipated that this policy will encourage industrial concentration, and could cause some monopoly distortion, but losses of these sorts it is believed will be offset by the advantages of horizontal integration, especially with respect to innovation and technological progress.[17]

Gorbachev also recognizes that the potential benefits of decentralized investment decisionmaking could be circumscribed by the rudimentary state of Soviet finance.[18] The State bank accordingly has been instructed not only to make credit more accessible, but enterprises will be given greater flexibility in allocating ruble credit balances to alternative uses. Consideration is even being given to making the ruble internationally convertible so that at some time in the not too distant future Soviet managers may be able to freely compete both in domestic and foreign markets.[19] Taken to its logical extreme Gorbachev's proposals for radical industrial reform and indicatively planned market socialism appear to converge startlingly toward the competitive capitalist market paradigm and raise the possibility that he desires the Soviet Union to ultimately become a modern mixed economy that differs only in some particulars from democratic socialist arrangements in the developed West.

Soviet Market Socialism

Gorbachev's diagnosis of the Soviet malaise, and the treatment he prescribes for it are broadly familiar. Command planning is the disease, his variant of market socialism is the cure, and peace and consumer prosperity is the prognosis. The formula is an appealing one in the abstract terms in which it is cast because it concedes a great deal to neoclassical theory and

market ideology, but its real import remains illusive. How far is Gorbachev really prepared to go with marketization?

It is difficult to decipher his intent partly because the command economy he is repudiating already contains many market elements that blur his assertions of radical change, and partly because it is unclear whether the terms he employs such as negotiated transactions, auctions, flexible prices, competition, etc. can really be construed in their conventional Western senses. This creates a complex problematic. On one hand, we must determine whether Gorbachev's program constitutes a significant departure from the mixed institutional arrangements that already exist,[21] and if so assess its prospects. On the other hand, we must clarify whether any improvements that might be undertaken will transform the Soviet economy into a socialist counterpart of competitive market capitalism.[22] These issues will be addressed sequentially, but before considering whether Gorbachev's reforms are really moving in a direction that replicates capitalist competition while preserving socialist ends, we must clearly fix the line of demarcation that separates Gorbachev's notion of a Soviet market from capitalist market arrangements in the West.

The principle that sets these concepts apart is private self-regulation.[23] Under capitalism independent workers, cooperators, innovators, entrepreneurs, managers, distributors and consumers have the right to competitively pursue their own private interest through a negotiated interactive process (the market) that determines equilibrium terms of exchange and an optimal structure of production. Under Soviet market socialism, as it has evolved and as Gorbachev seeks to improve it, these same individuals must conduct similar activities under the tutelage of the administrative bureaucracy, guided by goals, rules and incentives imposed by the state in its own interest, competing with one another only in ways approved by the central authorities. Workers and managers under these circumstances function essentially as instruments and agents of the state. They have some job choice and are permitted to shop in retail outlets, but cannot determine the assortment, quality or quantity of the goods offered to them. Instead of the market providing a mechanism through which independent entities competitively pursue their own economic interests, the Soviets have transformed it into a device that anticompetitively marshals individual initiative for the state's purposes. Just as Marx turned Hegel's historical dialectic on its head with his materialist conception of history, the Soviets have coopted the market so that it serves the interests of the state instead of those of private individuals.

This variant of the authoritarian control paradigm can be

called a state-directed market socialist economy to distinguish it from the self-directed market systems of the West. It is a flexible form that can accommodate a variety of ownership and control schemes, including selected competitive processes so long as they do not infringe the state's ultimate economic sovereignty. It constitutes an advance over the command model, but however designed still entails comprehensive central intervention and the suppression of private initiative. As such state-directed market socialist systems may outperform their command-administrative alternatives, but cannot realistically be expected to compete with their self-directed capitalist market rivals.[24]

Perestroika

The economic system Gorbachev seeks to radically reform as previously noted already contains aspects of a state-directed socialist market. Perestroika therefore is not intended to create a market economy de novo, but to modify the existing system until it either becomes a state-directed regime with efficiency characteristics that approach those of capitalists markets, or a self-directed economy based on some form of competitive private enterprise.

This task does not necessitate the abolition of planning and administration, nor does it preclude efforts to improve their efficiency,[25] but it does require that the market play an increased role in determining economic behavior. Gorbachev has endeavored to accomplish this in two primary ways; first by increasing the discretionary authority of workers, managers and other state agents, and second by strengthening material incentives.[26] This strategy which purportedly eschews "fine tuning" in favor of a bold devolution of power from the center to the periphery is the crux of Gorbachev's program of industrial reform.[27] It is a dramatic rhetorical departure from the past, and at least in this sense "radical."

Participant authority under the new scheme is to be increased in numerous ways. Workers are slated to have greater voice in management.[28] Their cooperative councils will be encouraged to give advice and they will be empowered to elect enterprise directors. Management will be strengthened by derationing (relaxing quota controls over) scarce inputs; barring (curtailing) administrative modifications of preliminary enterprise tekhpromfinplans, encouraging discretionary investment, prohibiting (curbing) bureaucratic revisions of "approved" tekhpromfinplans, and by permitting directors to contract on a negotiated basis for input purchases and output sales.[29] The authority of other state purchasers will be similarly expanded,

allowing them to negotiate for the goods they want, instead of passively accepting what they are assigned. In all instances material incentives are to be improved to assure that exertion and authority increase commensurately. Even consumers will be granted some influence over the supply of selected artisan goods and services, but in the main they will have to content themselves with product choice rather than consumer sovereignty.[30]

These steps insofar as they enhance efficient factor allocation, facilitate production and improve state purchasers' satisfaction are inherently beneficial from the leadership's perspective, but their impact is diluted by Gorbachev's implicit decision to keep perestroika within the limits of the state-directed market paradigm instead of opting for the more radical self-directed socialist market model. The market reform program he has chosen to implement preserves state control over participant goal functions, norms, rules, prices, incentives, tax, budgetary and monetary policy,[31] precluding any significant manifestation of private enterprise, competition or initiative. This clearly implies that the Soviet economy will continue to function inefficiently judged by the competitive standards of the developed West, but the magnitude of the losses imposed by the state-directed market Gorbachev is erecting will still depend considerably on whether state agents are required to exercise their discretionary authority at fixed or competitively negotiated prices.

Fixed Price Contracting

Any devolution of decisionmaking authority provides participants greater latitude in choosing the assortments and quantities of the inputs and goods they prefer regardless of pricing arrangements. Even if prices continue to be inflexibly set by the State Price Committee as they are at present, enterprise managers who previously were barred from acquiring scarce inputs in desired amounts will have the right to search for willing suppliers under Gorbachev's decentralizing scheme. State purchasers of final goods who formerly accepted the products assigned to them will do likewise. The prospects for both their success in a state-directed socialist market however are poor. Although primary input suppliers and producers will gladly sell goods that maximize their own bonuses, they will refuse orders that diminish their pecuniary rewards. Likewise state purchasers who would willingly compensate producers by paying higher prices will be prevented from doing so by the fixed price rule. As a

consequence while this version of Gorbachev's reform grants participants expanded choice, the rigidities of the state-directed socialist market prevent them from realizing their objectives.[32]

This unsatisfactory outcome can be mitigated by revising managerial goal functions so that bonuses are tied to sales. Buyers can refuse to purchase goods they disprefer compelling bonus maximizing producers to alter their product assortments. The effectiveness of such actions however depends on the state of aggregate effective demand. If demand is excessive, as it usually is in state-directed socialist markets, producers will have little difficulty selling the goods that best suit their needs, and the sales requirement will be ineffectual. Other devices can also be employed. Following Lange, the State Price Committee could periodically adjust prices when queues indicate shortages, and bloated inventories surpluses.[33] It can be easily shown however even under this scheme where prices are intermittently adjusted at the State's initiative that buyer's preferences will play a minor role in determining output supply, and virtually none when there is significant excess aggregate effective demand.[34]

The only exception to this principle arises in the case of intermediate input producers who are in a position to reciprocally satisfy each others special resource needs, and as a consequence can use barter as a surrogate for price compensation. Each participant will agree to sell the other the intermediate inputs it desires, adjusting their assortments and reducing their bonuses in the process, so long as the resources acquired permit them to expand production of other goods enough to increase their total pecuniary gain. A contracting reform of this sort could significantly improve interenterprise factor allocation, and aggregate productivity. It does not require troublesome modifications of the prevailing state-directed market control system and is probably the most promising aspect of Gorbachev's proposals for radical industrial reform.

Competitive Contracting

The relatively restricted scope of these potential gains in efficiency is explained by the absence of a mechanism that enables most state agents in a state-directed market economy to effectuate their demands. It might seem therefore that this deficiency could be remedied within the limits of the paradigm by relaxing the fixed price constraint, and permitting flexible prices that are generally responsive to approved purchasers' demands.

Here too however prospects are dimmer than might be casually supposed because the goal functions of most state purchasers are

inadequately specified. Gossnab, the new state trading companies, ministerial procurement organizations and retailers primarily purchase goods for the benefit of other entities and anonymous final consumers. They neither know, nor care about their client's preferences because individual state personnel and private consumers are prohibited from bidding for goods, and bonuses are paid without respect to the satisfaction of their demands. This implies that if Gorbachev permits state intermediaries to negotiate prices, they will do so solely on their own behalf. Their actions may take many forms. They might passively accept any prices sellers choose to set; they might bid according to state imposed norms, or they might bargain in a manner that minimizes bureaucratic effort, except in those instances where it furthers their personal material interests. In all these instances flexible pricing rights either have no positive impact so that administrative preferences continue to prevail, or degrade social welfare by disregarding the priorities of the state and the consuming public. It may be anticipated therefore that a radical flexible pricing reform could easily increase disequilibrium in the consumers' goods market and encourage monopoly distortions (given the relative inelasticity of final state purchaser's demand and restricted market entry), with the extent of these losses depending on the magnitude of excess demand.

Although the social distress caused by these pernicious actions could be acute, flexible pricing would nonetheless still provide some benefits. Some state purchasers with well defined preference functions including enterprise managers and the Ministry of Defense would be able to induce producers to better satisfy their demands whenever they were willing to pay a premium for the change, and they were not crowded out by other intermediaries.[35]

Growth and Stability

The investigation of the efficiency gains attainable by devolving decisionmaking authority from administrators to other functional state agents has focused on the static possibilities of reform. Gorbachev himself however seems to believe that his program will revitalize the economy, permitting it to grow once again at the high rates thought to have prevailed in the past. What about this aspect? Do his initiatives alter the dynamic potential of the Soviet state-directed market?

This question can be resolved by considering how the systemic determinants of growth are affected by his proposals; policy variables held constant.[36] The issue of investment efficiency is

especially important in this regard. The term encompasses all aspects of the complex process generating enhanced labor and capital productivity starting with the harnessing of the social and physical sciences, and spanning research, development, testing and evaluation, technology transfer, project choice, entrepreneurship, diffusion, management, training, motivation, resource allocation and capacity utilization. The effectiveness of these subprocesses, and hence investment efficiency depends on the performance characteristics of the state-directed market generally, and on the influence of particular constraints.

With respect to the latter it is widely agreed that Soviet investment efficiency is impaired by the institutional separation of science and RDT&E from production, by severe restrictions on decentralized enterprise investment, by the lack of rewards for entrepreneurship, and related motivational disincentives.[37] Gorbachev's proposals attempt to address some of these problems. The separation of science and RDT&E from production will be partly ameliorated by vesting control of an increasing share of research activities in production associations; complexes of enterprises under unified directive control.[38] Similarly, enterprises will be permitted to retain larger portions of their profits for discretionary investment purposes. These reforms are progressive, but their import is clouded because compensation remains inadequately linked to the merit of final results, and entrepreneurship continues to be discouraged.[39]

The reinvigoration of Soviet growth should it materialize therefore is unlikely to be sparked by tinkering with technical aspects of investment within the state-directed market paradigm. The supply of investment resources, including factors enhancing labor skills will have to be made more responsive to state demand. As has already been shown some gains in these regards should be forthcoming under either a fixed or flexible price regime, but they are relatively circumscribed because of the deficiencies of the state-directed market mechanism. Investment efficiency should improve in the intermediate input sector, and in other activities serving selected state purchasers, especially the Ministry of Defense. Beyond this gains should be haphazard. Although a spurt in aggregate Soviet economic growth might occur, stimulated by unwarranted expectations of higher material rewards, a sustained resurgence to the rates purportedly achieved during the sixties should not be anticipated on systemic grounds.

Revealed Preference

The disparity between the declaratory goals of perestroika and the real potential of Gorbachev's state-directed market strategy uncovered by the preceding analysis suggests that the leadership is more concerned about preserving authoritarian control than adopting the kind of reforms required to make the Soviet Union a prosperous socialist economy. Although Gorbachev undoubtedly desires to bolster productivity, efficiency, growth and consumer welfare to levels that rival the performance of self-directed market economies in the West he has shown no inclination to adopt the kinds of state-directed market reforms needed to do so, nor does he appear to be seriously contemplating a self-directed market reform based on private or cooperative enterprise. Indeed, the programs he has implemented to date are extremely timid even within the framework of the state-directed market paradigm.

For example, in his speech to the June Party Plenum he repeatedly stressed the need to make prices responsive to purchasers' demand, yet resolution No. 820 of 17 July 1987 indicates that fixed prices will predominate,[40] a position that has frequently been reaffirmed. The resolution distinguishes three types of approved prices. The first group which covers all goods and services of national and social significance is centrally fixed by the State Price Committee. The second type encompassing special order durables and new products is also fixed, but in this instance by enterprises rather than the central authorities who must approve these "negotiated" temporary prices within two years. Flexible prices (constrained by legal sanctions for abuse)[41] thus are restricted to the third, residual category which by the process of elimination includes all standard goods and services devoid of national or social significance. They may make some small contribution to the improvement of Soviet economic preformance, but their limited scope betrays the real depths of Gorbachev's conservatism.

His commitment to competition and managerial autonomy in a fixed price environment is also suspect.[42] Instead of increasing the number of firms exempt from central control and taking steps to promote market entry, Gorbachev has announced a policy of encouraging amalgamations and mergers that will pare the number of industrial enterprises from 37 thousand to several thousand.[43] Even if enterprises retain some autonomy within the new analgamations, this action can only impede competition and

diminish its potential benefits. Managerial choice likewise will almost certainly be more circumscribed than his rhetoric implies because Gosplan authority has not been seriously diminished,[44] and Gossnab will continue to ration a substantial volume of inputs, and the administrative bureaucracy retains the right to intervene in enterprise affairs when conditions warrant it. Critical aspects of Gorbachev's program on close scrutiny thus appear to be profoundly inconsistent with his professed aims, and unless revised will seriously degrade the potential benefits of perestroika.[45]

Prospects

The conservative cast of Gorbachev's industrial initiatives contrasts sharply with the sense of urgency that pervades his rhetoric. Apparently neither the spector of crisis, nor the allure of libertarian market socialism has convinced him that a program of genuine self-direct radical market reform is really imperative. This suggests that he does not perceive his options the way most Western analysts portray them. He does not believe that society's demands for autonomy and a high material quality of life need to be satisfied for the regime to endure; nor does he accept the proposition that the performance characteristics of self-directed market economies are best suited to the regime's needs.

Could Gorbachev be right? Can Soviet authoritarianism endure without undermining the regime's economic vitality, and national security interests? This is a question that has long vexed analysts and about which there is substantial disagreement.[46] A definitive answer remains illusive because of the uncertainties of Soviet statistics.[47] Nonetheless, it is relatively easy to show that Gorbachev's appraisal of the regime's options may be well founded.

The data in Table 1, compiled from official and CIA sources provide the requisite evidence. They demonstrate that Soviet GNP on the least favorable basis grew only slightly slower than America's 1965-87 and that the Soviet standard of living measured by per capita consumption grew nearly apace. Likewise the statistics in Table 2 derived from Abram Bergson's data and methods demonstrate that although Soviet factor productivity measured at American market prices is broadly lower than in Europe and the United States, the USSR has steadily improved its relative position, especially with respect in civilian and military machinebuilding productivity.[48] Although these estimates overstate Soviet accomplishments because civilian goods are seldom

responsive to consumer demand, and are subject to other numerous caveats,[49] the impression they convey about the duality of Soviet sectoral production potential, and comparative productivity growth are more or less accurate.[50] They imply that if perestroika were abandoned aggregate Soviet productivity growth would most likely closely track the American experience, underperforming it by a wide margin in the consumer sector but doing relatively better in civilian and military machinebuilding.[51] The potential benefits of perestroika can be best appraised in this light. The state-directed reforms Gorbachev thus far has chosen to implement may allow aggregate Soviet productivity growth to slightly outpace the US rate, with consumption continuing to seriously lag and machinebuilding productivity (especially weapons) gaining modestly. These anticipated results would not be extraordinary, but they would certainly satisfy minimum standards of acceptability and further the leadership's authoritarian purposes.

Conclusion

Many Western analysts are disinclined to believe that authoritarianism is competitively viable, and expect that the Soviet regime will either succumb to economic paralysis or gradually transform itself along self-directed market socialist lines. Mikhail Gorbachev's policies of glasnost' and perestroika have encouraged many to hope that the Soviet Union will evolve in the latter direction.

This essay has demonstrated as Gorbachev himself maintains that the economy and its military technological capabilities are more robust than they suppose.[52] It has been shown that the aggregate and sectoral factor productivities of the Soviet economy, subject to well known statistical uncertainties, are not drastically below the European standard, and that the state-directed market reforms Gorbachev has proposed should provide some improvements without compromising the regime's purposes. Contrary to Gorbachev's beguiling rhetoric and the principle of glasnost' (candor), careful analysis has revealed that his program of industrial perestroika is conservative rather than radical in three fundamental senses. First, the reforms he has chosen to implement support the status quo by enhancing the effectiveness of authoritarian control. Second, the state-directed market initiatives adopted are restrictive and surprisingly unambitious. He has relaxed some directive and rationing constraints, and introduced flexible pricing for some unimportant product categories, but has generally failed to address the really daunting problem of designing a state-directed market mechanism

that automatically and effectively equilibrates supply and state purchasers' demand. Finally, he has taken virtually no steps toward introducing competitive private enterprise, or any other form of self-direct market in the industrial sector. Although it is difficult to imagine how a state-directed market economy can hold its own in the global competition, Gorbachev shows no signs of seriously contemplating the adoption of a self-directed market mechanism in the foreseeable future.[53]

As a consequence it must be concluded that the rallying cries of Gorbachev's industrial reforms are misleading. Perestroika is not a radical strategy for revolutionizing or superceding state-directed market socialism, it is a continuation of familiar, state-direct market tendencies that have been at work since Stalin. This inference is significant in its own right, but its deeper importance lies in what it reveals about Gorbachev's ultimate priorities. The strategy he has adopted has been one of choice, not necessity. There are no legitimate technical reasons why he could not have pursued a more aggressive state-directed market socialist program, or even sought to implement aspects of self-directed democratic market socialism. In choosing to forego the benefits afforded by these alternatives, he has disclosed that libertarian socialist reform and the quality of Soviet life continue to be subordinated to the regime's more pressing authoritarian purposes.

Table 1

Alternative Estimates of Soviet
Economic Growth 1965-85
(and American Benchmark Statistics)

	1965-70	1970-75	1975-80	1980-85	1985-87	1965-87
Soviet						
Gross National Product						
1. Official	6.2	4.3	3.1	(4.1)	(3.9)	4.3
2. CIA	5.2	3.7	2.7	1.8	2.2	3.2
Industrial Output						
1. Official	8.4	7.5	4.4	3.7	4.5	6.0
2. CIA	6.3	5.9	3.4	1.8	2.1	4.1
Per Capita Consumption						
1. Official	5.9	4.4	3.4	2.1	2.3	3.8
2. CIA	4.3	2.6	1.7	0.8	-0.5	2.1
American						
Gross National Product	3.2	3.1	4.4	2.4	3.3	3.3
Industrial Output	3.5	1.8	5.4	3.4	3.1	3.5
Per Capita Consumption	2.7	2.0	3.4	2.0	2.6	2.5

Sources: CIA, USSR Measures of Economic Growth and Development, 1950-80, JEC, 1982, pp. 20, 55, 68, 75, 201, 335 Allocation of Resources in the Soviet Union and China - 1985, JEC, March 19, 1986, Table 1, p. 77, Table 3, p. 79, Table 4, p. 80, Table 5, p. 81; Narodnoe khoziaistvo 1985, pp. 15 and 402. Narodnoe khoziaistvo 1985, p. 411. Survey of Current Business various volumes (see Tables A1 and A2 available on request).
CIA, Revisiting Soviet Economic Performance Under Glasnost: Implications for CIA Estimates, SOV88-10068, September 1988, Tables 3 and 4, p. 9. DIA and CIA, Gorbachev's Economic Program: Problems Emerge, DDB-1900-187-88, June 1988, Table B-3, p. 31.

Method: Soviet estimates are computed at 1970 ruble prices, except for the quinquennium 1980-85, and the subperiod 1985-87, when 1982 ruble prices are substituted. The official GNP series is computed by combining the CIA's non-industrial series, and the official industrial series except for the quinquennium 1980-85 and the subperiod 1985-87 where the Soviet's own estimates using the United Nation's GNP accounting methodology is employed. The procedure adopted for the period 1965-80 assures that the coverage of GNP is the same in both countries, while taking explicit account of the pronounced differences in estimated industrial growth.

American estimates are computed from data valued at 1958, 1972 and 1982 constant dollars prices, chained together to replicate the official Soviet and CIA procedures. The exception is the industrial output series were the entries for 1965-70, and 1970-75 are based on late year 1982 prices due to the inaccessibility of prior data.

Note: Index number relativity affects perceptions of American growth. Series consistently calculated with fixed 1982 US price weights grow much more slowly than the figures reported above. See Table A3.

Metric: Compound annual rates of growth.

Table 2

Comparative International Aggregate, Industrial, and Machinebuilding Efficiency in 1960 and 1975

	Summary Estimates			
	GNP		Industry	MBMW
	1960	1975	1960	1975
I. Coefficients of Factor Productivity (Valued at US Dollar Prices; Index US=100)				
US	100	100	100	100
Europe	60	85	65	---
USSR	41	55	58	79

Sources: Abram Bergson, Productivity and the Social System-The USSR and the West, Table 6.1, pp. 76-77, Table 7.1, p. 93, Table 7.5, p. 108, Appendix Tables 11, p. 236, and 18, p. 241; Steven Rosefielde, "Sectoral Duality and Comparative Productivity in the USSR and the West," American Economic Review, forthcoming.

Method: Coefficients of factor productivity following Bergson are computed according to the formula:

$$\varrho = (y_i/y_j)/[(k_i/k_j)^{\alpha} (v_i/v_j)^{\beta} (l_i/l_j)^{1-\alpha-\beta}]$$

where the ith subscript refers to the Soviet Union, or Europe and the jth to the United States. y, k, v and l are output, fixed capital, inventories and labor, and the exponents are factor shares based on American dollar weights. Inventories are omitted in computing ϱ for industry and MBMW. ϱ values for Europe are simple averages of the figures for France, Germany, Italy and the UK. GNP is defined as gross material product, excluding selected final services: health care, education, government administration, defense and housing. Industry is defined broadly and includes manufacturing, mining, power, construction, transport and communications, and trade. Statistics in columns 1 and 3 are Bergson's; those in column 2 are derived directly from Bergson's data: those in column 4 are Rosefielde's based on the CIA's estimates of Soviet MBMW output and growth provided in CIA, USSR: Gross National Product Accounts, 1970, Washington, D.C., 1975, and Edwards, et. al., "U.S. and U.S.S.R.: Comparisons of GNP," Soviet Economy in a Time of Change, JEC, Vol. 1, 1979, p. 273.

Note: Weapons constituted 36 percent of Soviet MBMW at established ruble prices in 1970.

Table A1

Price Deflators for GNP by Major Product
Chain Index

	1965	1970	1972	1975	1980	1982
GNP						
1958 Series (1958=100)	--	--	141.6	180.3	260.8	304.2
1972 Series (1972=100)	--	--	100	127.3	184.2	214.8
1982 Series (1982=100)	--	--	--	--	--	100
Consumption						
1958 Series (1958=100)	110.9	--	134.4	169.7	247.6	287.5
1972 Series (1972=100)	--	--	100	126.3	184.2	213.9
1982 Series (1982=100)	--	--	--	--	--	100
Manufacturing						
1958 Series (1958=100)	--	118.4	124.3	156.0	206.0	232.8
1972 Series (1972=100)	--	--	100	125.5	165.7	187.3
1982 Series (1982=100)	--	--	--	--	--	100

Sources: Survey of Current Business, July 1984, Vol. 64, No. 7, Table 7.2, p. 81 and Table 7.22, p. 90; Survey of Current Business, July 1973, Vol. 53, No. 7 Table 8.1, p. 49, Table 8.6, p. 51 Survey of Current Business, July 1976, Vol. 56, No. 7, Table 7.1, p. 58, and Table 7.7, p. 60; Survey of Current Business, July 1971, Vol. 51, No. 7, Table A, p. 46.

Method: The price indexes are pieced together from various issues of the Survey of Current Business. All price levels for the 1972 series are reported. All price levels for the 1958 series are reported, except those after 1972 are extrapolated from the 1972 figure using the 1972 inflation series. The manufacturing price statistics for 1970 and 1972 are the arithmetic average of the durables and non-durables series. The underlying values expressed in 1958 prices are:

	1970	1972
durables	108.9	112.8
non-durables	127.8	135.7

Table A2

American National Product By Major Component
1965-85

	1965	1970	1975	1980	1985	1987
GNP						
1982 dollars	1,879.3	2,197.8	2,559.8	3,168.3	3,607.5	3,847.0
1972 dollars	--	--	1,191.7	1,475.0	--	--
1958 dollars	617.8	722.5	--	--	--	--
Consumption						
1982 dollars	1,244.3	1,372.8	1,647.7	1,993.1	2,352.6	2,521.0
1972 dollars	--	--	770.3	931.8	--	--
1958 dollars	432.8	477.5	--	--	--	--
Manufacturing						
1982 dollars	--	--	505.7	657.4	790.3	839.5
1972 dollars	--	--	270.0	351.0	--	--

Sources: Survey of Current Business, July 1988, Vol. 68, No. 7, Table 1.2, p. 40, and Table 6.2, p. 78; Survey of Current Business, July 1987, Vol. 67, No. 7, Table 1.2, p. 26, and Table 6.2, p. 63; Survey of Current Business, July 1984, Vol. 64, No. 7, Table 1.2, p. 23 and Table 6.2, p. 69; Survey of Current Business, July 1976, Vol. 56, No. 7, Table 1.2, p. 24 and Table 6.2, p. 49; Survey of Current Business, July 1973, Vol. 53, No. 7, Table A, p. 52, and Table 1.11, p. 21; Survey of Current Business, July 1971, Vol. 51, No. 7, Table A, p. 46.

Method: Product data expressed in prices other than 1982 are converted to 1982 with the index values for 1982 (of the other series) in Table A1.

Table A3

Alternative American Benchmark Statistics
at Fixed 1982 Dollar Prices
(Compound Annual Rates of Growth)

	1965-70	1970-75	1975-80	1980-85	1965-85
Gross National Product	3.0	2.2	3.4	2.4	2.7
Industrial Output	3.5	1.8	4.8	3.4	3.4
Per Capita Consumption	2.7	1.7	2.1	2.0	1.6

Source: Survey of Current Business, July 1986, Vol. 66, No. 7, Table 8.2, p. 84; Business Statistics 1982: A Supplement to the Survey of Current Business, November 1983, p. 3; Table A4, this paper.

Table A4

Alternative American Benchmark Statistics
at Fixed 1982 Dollar Prices
(Underlying Value Series: Billions)

	1965	1970	1975	1980	1985
Gross National Product	2,087.0	2,416.2	2,695.2	3,187.8	3,585.0
Industrial Output	402.0	476.9	521.2	657.4	776.9
Per Capita Consumption	6,362	7,275	7,926	8,783	9,713
Population (Millions)	194.3	205.1	216.0	227.8	239.3

Source: Survey of Current Business, July 1986, Vol. 66, No. 7, Table 8.2, p. 84.

Method: Industrial output is calculated by taking the manufacturing statistics reported in Table A2 valued at 1982 prices and backcasting with the following index computed at constant 1967 prices:

	1965	1970	1975	1980
Manufacturing	89.7	106.4	116.3	146.7

See Business Statistics 1982, November 1983, p. 3.

Table A5

Population: 1900-1986

1950	152,271
1955	165,931
1960	180,671
1965	194,303
1970	205,052
1975	215,973
1980	227,757
1985	239,283
1987	243,773

Source: Statistical Abstract of the United States 1987, Bureau of Census, US, Department of Commerce, Edition 108, Table 2, p. 7.

Notes: Estimates are for July 1. Population includes armed forces abroad.

Notes

1. Mikhail Gorbachev, "O zadachakh partii po korennoi perestroike upravleniia ekonomiki (doklad general'novo sekretaria KPSS M.S. Gorbacheva na Plenume TsK KPSS 25 iiunia 1987 goda), Pravda, June 26, 1987, pp. 1-6 and "Zakliuchitel'noe slovo General'novo sekretaria TsK KPSS M.S. Gorbacheva na Plenume TsK KPSS 26 iiune 1987 goda," Pravda, June 27, 1987, pp. 1-2. The English version cited for the general readers convenience throughout this essay is: Mikhail Gorbachev, On the Tasks of the Party in the Radical Restructuring of Economic Management, 1987. These speeches elaborate themes previously raised at the April 1985 and January 1987 Communist Party Central Committee Plenums. Also see Postanovlenie Plenuma Tsentral'novo Komiteta KPSS "o zadachakh partii po korennoi perestroike upravleniia ekonomikoi." Pravda, June 27, 1987, pp. 1-3; and "Zakon Soiuza Sovetskikh Sotsialisticheskikh Respublik o gosudarstvennom predpriiatii (ob"edinenii), Pravda, July 1, 1987, pp. 1-4. Zakon Soiuza Sovetskikh Sotsialisticheskikh Respublik o gosudarstvennom predpriiatii (ob"edinenii), 1987; O korennoi perestroike upravleniia ekonomikoi (sbornik dokumentov), 1987; Zakon Soiuza Sovetskikh Sotsialisticheskikh Respublik o trudovykh kollektivakh i povyshenii ikh roli v upravlenii predpriiatiiami, uchrezhdeniiami, organizatsiiami: Polozhenie o poriadke zakliucheniia kollektivnykh dogovorov, 1987; Materialy Plenuma Tsentral'novo Komiteta KPSS, 27-28 ianvaria, 1987, 1987; and Materialy Plenuma Tsentral'novo Komiteta KPSS, 25-26, 1987, 1987. A visionary exposition of the First Secretary's views is provided in Mikhail Gorbachev, Perestroika: New Thinking for Our Country and the World, Harper and Row, New York, 1987. The basic program of radical economic reform has not been modified since the July 1987 Party Plenum. See M.S. Gorbachev, O khode realizatsii reshenii XXVII s"ezda KPSS i zadachakh po uglubleniiu perestroiki, 1988; Materialy XIX Vsesoiuznoi konferentsii Kommunisticheskoi partii Sovetskovo Soiuza, 28 iiunia - 1 iiulia 1988, 1988 (available in English); O korennoi perestroike upravleniia ekonomikoi, (sbornik dokumentov), 1988. For an alternative statement of Gorbachev's program see Abel Aganbegyan, The Economic Challenge of Perestroika, University of Indiana Press, Bloomingtoin, Indiana, 1988.

2. Thomas Naylor, The Gorbachev Strategy: Opening the Closed Society, Lexington Books, Lexington, Massachusetts, 1987.

3. Central Intelligence Agency, "Statement to the Subcommittee on National Security Economics, Joint Economic Committee, September 14, 1987, p. 24, and Defense Intelligence Agency, "Statement to the Subcommittee on National Security Economics, Joint Economic Committee," 14, September 1987. CIA and DIA, Gorbachev's Economic Program: Problems Emerge, DDB-1900-187-88, June 1988.

4. "The general meaning and thrust of a radical management reform are clear to us. They boil down to this formula: more socialism, more democracy." Gorbachev, Radical Restructuring of Economic Management, p. 40. Cf. Gorbachev, Perestroika, pp. 36-38, and N. Ia. Petrakov, Demokratizatsiia khoziaistvennovo mekhanizma, Ekonomika, 1988.

5. An interesting aspect of Gorbachev's liberalism has been his limited encouragement of entrepreneurship. Managers have been given latitude to initiate new ventures that do not interfere with their primary commitments. They may also consummate mutually advantageous deals with other firms on the same condition. These opportunities have given rise to some heady optimism, but it remains to be seen whether the principle can be extended to encompass a significant segment of the Soviet economy. See Mikhail Gorbachev, Using the Potential of Cooperatives for Furthering Perestroika, 1988.

6. Gorbachev, Radical Restructuring of Economic Management, pp. 6 and 36-38. "The contradictions, gradually accumulating and not being solved in time, were actually acquiring pre-crisis forms." p. 6. "We need in-depth, truly revolutionary transformations to get our economy out of the pre-crisis situation it is in." p. 38. Cf. Gorbachev, Perestroika, p. 19, "...by the beginning of the eighties (GNP growth) had fallen to a level close to economic stagnation." Cf. Materialy XIX Vsesoiuznoi konferentsii Kommunisticheskoi Partii Sovetskovo Sviuza, 1988, p. 3.

7. Gorbachev, Radical Restructuring of Economic Management, pp. 36-38.

8. Ibid., pp. 38-39. Cf. Gorbachev, Perestroika, pp. 33-34.

9. Gorbachev, Radical Restructuring of Economic Management, p. 43. "Factories should be put in such conditions as will prompt economic competition among them to meet consumer demand in the best possible way. The interests of the state will be guaranteed

by a system of state commercial orders. But they should offer priority, preferential economic terms, provide for reciprocal accountability of the sides, and be awarded, as a rule, on a competitive basis." p. 45.

10. Ibid., p. 48, 50.

11. Gosplan will continue to set yearly "tasks," but the means for fulfilling them will be left to the enterprises. Ibid., pp. 46 and 48.

12. Ibid., pp. 49-50.

13. Ibid., pp. 47 and 50. "Fulfilment of state contracts should be the main criterion for the performance of an enterprise and for rewarding its workers." p. 46.

14. Ibid., p. 50.

15. Ibid., p. 46.

16. Ibid., p. 47.

17. Ibid., p. 54.

18. Ibid., p. 51-52.

19. CIA, "Statement," p. 14. Steven Rosefielde, "A (Partially) Convertible Ruble," FPI Policy Briefs, SAIS, Johns Hopkins, Decmeber 1988, pp. 1-17.

20. Robert Bathurst, "On Soviet Linguistics: Expropriating Utopia," in Brian Dailey and Patrick Parker, Soviet Strategic Deception, Lexington Books, 1987, pp. 93-118., Gorbachev, Perestroika, p. 42. "Just think: how can we agree that 1917 was a mistake...? No, a strict and impartial view of the facts of history suggests only one conclusion: it is the socialist option that has brought formerly backward Russia to the 'right place' - the place the Soviet Union now occupies in human progress."

21. Steven Rosefielde and R.W. Pfouts, "Economic Optimization and Technical Efficiency in Soviet Enterprises Jointly Regulated by Plans and Incentives," European Economic Review, Vol. 32, No. 6, 1988, pp. 1285-129[illegible].

22. Steven Rosefielde, "Regulated Market Socialism: The Semi-Competitive Soviet Solution," Soviet Union-Union Sovietique, Vol. 13, Part 1, Spring 1986, pp. 1-20. For an analysis of the historical process that transformed the Soviet Union from a command to a market economy see Steven Rosefielde "Soviet Market Socialism: An Evolutionary Perspective," Research on the Soviet Union and Eastern Europe Spring 1989.

23. Mikhail Bernstam, "Anatomy of the Soviet Reform," Global Affairs, Spring 1988, pp. 63-88.

24. Some East European economists recognize that the Soviet market mechanism is intended to serve as a devise for preserving indirect centralized control, but have not clearly analyzed the distinctions between state-directed and self-directed socialist systems. See Laszlo Csaba, "Some Lessons from Two Decades of Economic Reform in Hungary," Communist Economies, Vol. 1, No. 1, 1989 pp. 17-29. Cf. Jan Mujzel, "Socio-economic Reforms in Eastern Europe and Real Socialism," Communist Economies, Vol. 1, No. 1, 1989, pp. 3-15, and Gabriel Temkin, "On Economic Reform in Socialist Countries: The Debate on Economic Calculation under Socialism Revisited," Communist Economies, Vol. 1, No. 1, 1989, pp. 31-59.

25. Edward Hewett, Reforming the Soviet Economy, Brookings, Washington 1987.

26. Gorbachev, Radical Restructuring of Economic Management, p. 59. Cf. Gorbachev, Perestroika, pp. 50-55.

27. In addition to "radically" reforming the Soviet economic mechanism, Gorbachev has also adopted many major policy changes including the use of quality control inspectors at the plant level, similar to procedures used by the military (Gospriyemka). These policies are important but are not integral to the systems questions central to this essay. Interested readers are directed to the CIA "Statement" on policy matters.

28. Gorbachev, Radical Restructuring of Economic Management, pp. 40-41. Gorbachev, Perestroika, pp. 55-59.

29. Heidi Kroll, "The Role of Contracts in the Soviet Economy," Soviet Studies, Vol. XL, No. 3, July 1988, pp. 349-366.

30. CIA "Statement," p. 17.

31. Gorbachev, Radical Restructuring of Economic Management, pp. 48-49.

32. For a mathematical treatment of these issues Steven Rosefielde and R.W. Pfouts, "The Efficiency Potential of Goal Directed Market Systems," paper presented at the Joint Soviet-American Seminar on Enterprise Efficiency, Central Economics and Mathematics Institute, Moscow, January 3-17, 1988. The argument in the text is easily extended to cover new products and autonomous entrepreneurial initiatives.

33. Oscar Lange, "On the Economic Theory of Socialism," Review of Economic Studies, October 1936, February 1937.

34. Steven Rosefielde, "Competitive Market Socialism Revisited: Impediments to Efficient Price-Fixing," Comparative Economic Studies, Vol. XXVIII, No. 3, Fall 1986, pp. 17-23.

35. G. Weickhard, "The Military-Industrial Complex and Economic Reform," Soviet Economy, Vol. 2, No. 3, July-September 1986, pp. 193-220, and Russell Bova, "The Soviet Military and Economic Reform, Soviet Studies, Vol. XL, No. 3, July 1988, pp. 385-405.

36. On the policy question, see CIA, "Statement," pp. 4-8.

37. Judith Thornton, "The Technological Limits To Soviet Power," paper presented to the 19th meeting of the American Association for the Advancement of Slavic Studies, Boston, November 7, 1987; R. Amann and Julian Cooper, Technical Progress and Soviet Economic Development, Blackwell, London, 1987.

38. Gorbachev, Radical Restructuring of Economic Management, p. 54.

39. Abram Bergson, "Managerial Risks and Rewards in Public Enterprise," Journal of Comparative Economics, Vol. 2, No. 3, September 1978, pp. 211-25.

40. Gertrude Schroeder, "Testimony to the JEC," 4 September, 1987. O korennoi perestroike upravleniia ekonomikoi, pp. 160-161. Materialy XIX Vsesoiuznoi konferentsii Kommunisticheskoi Partii Sovetskovo Souiza, pp. 19-20.

41. The new enterprise law stipulates that fines and other punitive actions will be taken if managers "freely" negotiate "exploitive" prices. These strictures could chill managerial initiative. See Zakon o gosudarstvennom predpriiatii (ob"edinenii), p. 50. An up to date review of Soviet pricing arrangements is provided in Morris Bornstein, "Soviet Price Policies," Soviet Economy, Vol. 3, No. 2, 1987, pp. 96-134.

42. Gorbachev, Radical Restructuring of Economic Management, p. 42. "We proceed from the need to step up real competition between factories and organizations, including competition between government-run and cooperative ones, for meeting consumer and national economic requirements. The winners in this competition should receive tangible economic benefits in reward. This is in line with the principles of socialism and readily understandable." The "socialist" competition Gorbachev has in mind here is goal-directed, not self-directed. Firms are not automatically rewarded by higher retained profits and bonuses for increasing sales, market share and net revenue; winners of the "competition" to satisfy buyers' demands are determined by the administrative bureaucracy. They judge the results; they assign the rewards that suit them. Also see CIA and DIA, Gorbachev's Economic Program: Problems Emerge.

43. Ibid., p. 54. Amalgamations and mergers purportedly will be voluntary, but the implicit administrative charge is clear: "The gate should be thrown wide open to all integration processes."

44. Vyachaslav Danilin, "Devising an Efficient Strategy for Enhancing Enterprise (Combine) Productivity: The Use of Normative Methods," in Rosefielde and Danilin, Theory and Measurement of Economic Efficiency in the Soviet Union and the United States, unpublished manuscript, 1989.

45. Cf. Wlodzimierz Brus, "Utopianism and Realism in the Evolution of the Soviet Economic System," Soviet Studies, Vol. XL, No. 3, July 1988, pp. 434-443.

46. Abram Bergson and Herbert Levine, eds., The Soviet Economy Toward the Year 2000, George Allen and Unwin, London, 1983; Igor Birman, Ekonomika nedostach, Chalidze Publishers, 1983; Padma Desai, The Soviet Economy: Problems and Prospects, Basil Blackwell, Oxford, 1987; DIA, Gorbachev's Modernization Program: A Status Report, DDB-1900-140-87, August 1987; Richard Kaufman,

"Industrial Modernization and Defense in the Soviet Union," paper prepared for the NATO Colloquium, April 1-13, 1987, Alec Nove, "'Radical Reform', Problems and Prospects," Soviet Studies, Vol. XXXIX, No. 3, July, pp. 452-467; Marshall Goldman, Gorbachev's Challenge: Economic Reform in the Age of High Technology, Norton, New York, 1987; George Sokoloff, The Economy of Detente: The Soviet Union and Western Capital, St. Martin's Publishers, 1987; Philip Hanson, Soviet Industrial Espionage: Some New Information, The Royal Institute for International Affairs, London, 1987; Igor Birman, Stroit zanovo, Chalidze Publishers, 1988.

47. Steven Rosefielde, "The Soviet Economy in Crisis: Birman's Cumulative Disequilibrium Hypothesis," Soviet Studies, Vol. 40, No. 1, April 1988, pp. 1-23. Michael Boretsky, "The Tenability of CIA Estimates of Soviet Ecnomic Growth," Journal of Comparative Economics, Vol. 11, No. 4, December 1987, pp. 517-542. CIA, The Impact of Gorbachev's Policies on Soviet Economic Statistics, SOV88-10049, July 1988; CIA, Revisiting Soviet Economic Performance Under Glasnost: Implications for CIA Estimates, SOV88-10068, September 1988.

48. The concept of productivity is more illuminating than output because it takes account of differences in American and Soviet factor endowments, including land, labor and capital. Also note that the comparative machinebuilding productivity statistics are derived using Bergson's method, but were not computed by him. They are solely the author's responsibility.

49. Dollar estimates overstate the Soviet achievement. If the same calculations were made in rubles, or computed as geometric means of ruble and dollar values, Soviet performance would be relatively poorer. For a more thorough discussion of this and other statistical limitations regarding the measurement of comparative productivity see Bergson, "Comparative Productivity;" Abram Bergson, "Comparative Productivity: USSR, Eastern Europe and the West: Appendix Sources and Methods for Basic Data," unpublished manuscript 1987; and Steven Rosefielde, "Sectoral Duality and Comparative Efficiency: The USSR and the West," American Economic Review, forthcoming.

50. Aggregate data for computing productivity comparisons in accordance with Bergson's conventions are not available for 1985. Nonetheless, related calculations computed both in dollars and

rubles demonstrate that at worst, aggregate Soviet productivity slipped marginally behind the US 1975-85. See Steven Rosefielde, Tempting Fate: Economic Foundations of Soviet National Security Strategy, Chapter 12, unpublished manuscript, May 1989.

51. Steven Rosefielde, "Economic Foundations of Soviet National Security Strategy," Orbis, Vol. 30, No. 2, Summer 1986, pp. 317-330. Cf. Andrew Matosich and Bonnie Matosich, "Machine Building: Perestroyka's Sputtering Engine," Soviet Economy, Vol. 4, No. 2, April-June, 1988, pp. 144-176.

52. "I shall repeat that as far as United States foreign policy is concerned, it is based on two delusions. The first is the belief that the economic system of the Soviet Union is about to crumble and that the USSR will not succeed in restructuring. The second is calculated on Western superiority in equipment and technology and, eventually in the military field. These illusions nourish a policy geared toward exhausting socialism through the arms race, so as to dictate terms later. Such is the scheme; it is naive." Gorbachev, Perestroika, p. 220.

53. Edward Hewett, et. al., "The Aftermath of the 19th Conference of the CPSU: A Soviet Roundtable," Soviet Economy, Vol. 4, No. 3, July-September 1988, pp. 181-223.

Summary

Mikhail Gorbachev's programs for the radical reform of domestic and foreign relations have created the impression that Soviet military capabilities have been reduced; that the Soviet arms buildup is unsustainable, and that perestroika will inevitably induce the leadership to abandon its traditional national security goals in favor of socialist prosperity.

This statement demonstrates that these impressions are mistaken; that Soviet national security strategy has not fundamentally changed under Gorbachev because:

1. Soviet military capabilities are expanding
2. Economic factors favor rather than inhibit a continuation of the Soviet arms buildup
3. Perestroika as it is currently designed will not radically alter the performance of the Soviet economy
4. The Soviets show no signs that they are seriously contemplating adopting a self-directed market system along American, or Swedish lines that is essential if real socialist prosperity is to be achieved.

It follows directly that Mikhail Gorbachev's public initiatives do not as yet provide adequate grounds for America relinquishing its competitive strategy. There is ample room for diplomatic flexibility, but improved political and economic relations should not be mistaken for a genuine reduction in the Soviet military threat. Our first priority must be the preservation of strategic and conventional military deterrence at a high level of confidence. With this assured we can move foward prudently to improve all other aspects of our bilateral relations.

Introduction

After decades of glacial change, Soviet national security policy is in a state of flux. Under the banner of "new thinking" (novoe myshlenie), Mikhail Gorbachev has declared that the Soviet

Union and the West can enduringly coexist, that both sides share "common values," that it is possible to achieve equivalent military sufficiency at drastically lower levels of force, and that nuclear weapons can be abolished by the year 2000. Moreover he has promised to back his visionary words with deeds, accepting large asymmetric cuts in INF forces, allowing intrusive on-site inspections, reducing troop and tank deployments in the Western TVD, including five Operational Maneuver Groups, and proposing conventional parity in Europe at 60 to 65 percent of current NATO levels within six years.

Although the jury is still out on the implementation of these promises, and their consequences for Western national security, many scholars have come to surmise that Gorbachev may be leading the Soviet Union beyond Brezhnev's "centrist," dual-track national security policy (the balanced use of military and political instruments) toward a new strategy stressing diplomacy and commerce at the expense of military interests, and to infer that the West should respond in kind. Are they right? Is Gorbachev likely to subdue the military, drastically pare defense outlays and discard his military option? How should the national security community respond to this interpretation of Gorbachev's intent?

My statement addresses these questions from an economic perspective. Without challenging the premise that the Soviet political leadership can unilaterally reduce the scale of its military programs, it will be shown nonetheless that the economic benefits of such an initiative are apt to be slight, and that economic factors favor a shift in the composition of Soviet national security expenditures toward modernization (including the development of weapons using "new physical principles" designed for the future battlefield) rather than an abandonment of the dual track strategy, replicating the Khrushchevian pattern of the late fifties. More precisely, it will be shown that the

duality of the Soviet economy, resulting from the unusually high productivity of the weapons sector permits the leadership to reduce conventional and nuclear deployments, transfer resources to civilian uses, while simultaneously modernizing its arsenal in ways that could make the world safe for conventional war. Although this course is not ordained, the ongoing pattern of Soviet arms procurements suggests that it would be premature to suppose that the Soviets have partially or wholely abandoned Brezhnev's dual track approach in favor of equivalent sufficiency, or minimum deterrence. Careful analysis moreover indicates that there is little to be gained by disregarding the Soviet arms buildup, and building down our own forces in the hope that the Soviets will follow suit, allowing us to strengthen security at reduced levels of effort. Extended deterrence today preserves rather than threatens peace. Western force reductions might accomplish this same objective at lower cost, but could also easily be destabilizing. As a consequence, while the potential opportunities contained in Gorbachev's various proposals should be seriously examined, euphoria should not sway our judgment, or be allowed to compromise our national security.

Dual Track Strategy

The term dual track strategy in the present context refers to the balanced use of military and political instruments to attain Soviet national security goals. The concept encompasses a broad middle ground between militarism and pacificism; that is between onesided reliance on armed force, or diplomacy. The attributes of Brezhnev's variant of the dual track are broadly familiar. He sought to maximize national security by rapidly modernizing Soviet armed forces, while simultaneously attempting to degrade Western resolve and capabilities through arms control and disarmament initiatives that appeared superficially fair, but were disadvantageous to the West. These policies were

supplemented by other methods. The Soviets encouraged wars of national liberation, supported communist and other friendly parties abroad, employed foreign proxies, distributed aid and employed diplomacy to its commercial advantage wherever possible. On balance the approach was flexible and effective. The Soviets sought to achieve their ends patiently; systematically modernizing their arsenal and entering into protracted negotiations until political factors compelled the other side to blink.

Gorbachev by contrast is a "mover and a shaker." Like his predecessors he has adopted a declaratory policy that advocates peaceful coexistence, non-aggression, nuclear disarmament and military parity, but instead of waiting for the West to make unilateral concessions, he has changed the style of the bargaining game by announcing a succession of bold, confidence building initiatives designed to reassure the West that it can safely reduce its conventional and nuclear forces. In doing so he has increased the weight placed on the political dimension of the dual track policy, but has not abandoned the dual track strategy itself. These initiatives have captured the public's imagination. Asymmetric INF force reductions, unilateral curtailment of troop and tank deployments, on-site inspections, acknowledgment of prior deceptive practices, and promised cuts in defense spending have inclined many to suppose that Gorbachev's oratory is sincere, and constitutes a radical break with the dual track strategies of the past, even though the evidence on implementation remains thin.

This impression has been buttressed further by equally audacious changes in East-West commercial relations. Whereas Brezhnev was content to use Soviet national power as device for obtaining credit and selling natural gas to the West on favorable terms, Gorbachev has altered Soviet law to permit joint ventures with capitalist firms; sanctioned majority foreign ownership and

has taken steps to drastically expand trade by making the ruble partially convertible.

Perhaps the public is right to be impressed. Perhaps, as he claims, Gorbachev believes that the military burden is too great to bear and that economic salvation lies in abandoning the dual track strategy in favor of a onesided reliance on diplomacy, cooperation and peaceful international commerce.

Close scrutiny of Soviet weapons procurement programs, the INF treaty, and the proposed agreements on START, conventional and chemical force reductions cast grave doubt on this supposition. It strongly indicates that Gorbachev has neither abandoned Brezhnev's arms modernization program, nor his efforts to obtain significant asymmetric military advantages through the "peace process," and raises serious questions about the stability of deterrence in the years ahead. Gorbachev clearly appears to be willing to pay a higher price to achieve his ends than his predecessors, but the final result is much the same: an effective dual track strategy predicated on rapid military modernization and asymmetric Western disarmament concessions that has the potential of negating extended deterrence.

Preponderance of Force

The evidence regarding military modernization is straightforward. For more than two decades the Soviets have greatly outproduced the United States and the West in a wide variety of weapons systems, while maintaining a stable order of battle.[1] This has allowed them to build an enormous strategic reserve, and simultaneously deploy increasingly capable replacement systems. Table 1 taken from official DOD sources, documents the phenomenon for the decade 1977-88. It demonstrates that the Reagan's military buildup, and Soviet economic difficulties notwithstanding, the USSR managed to procure more weapons of every type than the US, with the sole exception of

major surface naval combatants. Most of this accumulation occurred under Brezhnev, but the advent of Gorbachev changed little. The figures for 1986 and other recent DIA data through early 1989 confirm that perestroika, glasnost' and novoe myshlenie have had no visible impact on the established pattern. While Gorbachev's decision to unilaterally withdraw six divisions may seem to portend a less aggressive course, it has not yet visibly dampened the leadership's secret enthusiasm for rapid military modernization, nor provided us with an accounting of the vast supplies of weapons DIA statistics inform us have been procured but not actively deployed.

The Economy

Many analysts recognize that the substantive changes in Soviet national security policy are less than meet the eye, but are inclined nonetheless to muse whether Brezhnev's dual track strategy is really in the regime's long term interest. On more than one occasion, Gorbachev and his spokesman have singled out excessive military spending as a principal cause of the current

Table 1

Soviet and American Weapons Production
1977-88

	1977-86 Cumulative		1986		1988	Trend	
	U.S.	USSR	U.S.	USSR	USSR	US	USSR
Strategic Weapons							
ICBM	95	1,720	11	120	150	↓	↓
SLBM	620	1,180	50	100	100	-	↓
SSBN	8	20	1	1	(1)	↑	↓
Long Range Bombers	29	375	26	50	45	↑	↑
IRBMs and MRBMs	200	1,000	-	-			
Ground Combat							
Tanks	7,300	24,400	750	2,600	3,500	↑	↑
APCs and Fighting Vehicles	9,200	49,200	1,420	3,500	4,550	↑	-

Soviet and American Weapons Production
1977-88

	1977-86 Cumulative U.S.	1977-86 Cumulative USSR	1986 U.S.	1986 USSR	1988 USSR	Trend US	Trend USSR
Artillery, Guns, Mortars and MRLs (100 mm and over)	3,000	26,300	560	2,100	2,800	↑	↑
Anti-Aircraft Artillery	70	800	0	100	-	-	↓
Ships							
Major Surface Combatants	95	80	5	8	9	-	↓
Attack Submarines	34	70	2	7	(8)	↑	↑
Amphibious Ships	6	17	1	2	-	↓	-
Aircraft							
Tactical Combat Aircraft and Strategic Interceptors	3,500	8,200	350	700	700	-	↓
Military Helicopters	1,800	4,700	260	450	400	↑	↓
Surface to Air Missiles	16,200	140,000	-	-	-	-	-

Sources: Allocation of Resources in the Soviet Union and China-1986, JEC, 1988, pp. 163-166; Soviet Military Power, 1987, p. 121. Allocation of Resources in the Soviet Union and China-1987, JEC, 1989, p. 111.

Data: Statistics were provided to Senator William Proxmire, Chairman, Subcommittee on National Security Economics by Thomas P. Christie, Deputy Assistant Secretary of Defense for Plans and Resources, November 19, 1987. Figures for IRBMs, MRBMs and surface to air missiles are taken from SMP 87. Soviet procurement data for 1988 provided in Allocation 1987 are not always defined consistently with the statistics for 1977-86. Dashes are inserted where appropriate to indicate missing information. Also SSBN and attack submarines are not separated for 1988. I have therefore assumed that SSBN production was equal to the 1986 level, and attributed the remainder to attack submarines.

The tables from which these statistics were drawn do not specify whether they include exports and imports. The ratios in Table I-1 p. 162 and those on p. 161

suggest that the "production for" definition was used which includes imports and excludes exports. Analysis of the ratios provided indicates any distortion caused by the inclusion or exclusion of imports and exports in these tables is relatively minor.

Comment: The arrows represent the DIA's subjective evaluation of the ten year trend.

Soviet economic malaise. Is it reasonable to suppose that Gorbachev can indefinitely postpone addressing the urgent needs of the Soviet economy in order to augment a preponderance of power that may never be usefully employed? Will the press of events force him to accept the logic of his own declaratory policy, when his dual track strategy is displaying increasing signs of success?

The answer to these rhetorical questions turn on Soviet growth prospects, the relative performance potential of the military subeconomy, and the impact defense expenditures have on the civilian sector. The first of these factors obviously will be decisive if aggregate performance is extreme in either direction. Brezhnev's dual track strategy in all likelihood will be sustainable if the general economy grows rapidly, and will be untenable if it is collapsing. Although, Soviet aggregate growth prospects are poorly defined, and intensely controversial the weight of the evidence indicates that the Soviet experience in the nineties will probably fall within the normal range. Using the experience of recent past as a guide, aggregate GNP is likely to increase between 1.0 and 4.5 percent per annum (Table 2). The precise rates are of little importance. If GNP does grow moderately, the viability of Brezhnev's dual track policy hinges on relative military economic performance potential and sectoral interdependencies. Generally speaking those who believe that rapid military modernization cannot be sustained hold the

Table 2

Postwar Soviet GNP Growth

	1955-60	1960-65	1965-70	1970-75	1975-80	1980-85	1985-87
Official	6.3	5.4	6.3	4.5	3.6	(4.1)	(3.9)
CIA	5.9	5.0	5.2	3.7	2.7	2.2	1.7

Sources: Steven Rosefielde, Tempting Fate: Economic Foundations of Soviet National Security Strategy, unpublished manuscript, Tables 9.5, and 9.14. CIA and DIA, Gorbachev's Economic Program: Problems Emerge, DDB-1900-187-88, June 1988, Table B-4, p. 31. Narodnoe khoziaistvo SSSR, 1987, p. 15.

Data: Estimates 1955-80 are computed at 1970 ruble factor cost. Figures thereafter are valued at 1982 ruble factor cost. The 1982 prices generate lower rates of growth, reflecting the usual index number relativity effects.

Method: The official series is computed by adjusting the CIA's estimates in two ways. First the industrial output figure for 1970 is extrapolated to other years with official growth rates. Second the construction series is adjusted to grow at the official rate indicated by the gross output series up to 1980. The CIA rate is used thereafter.

The bracketed figures are obtained from the newly published official data compiled according to the United Nations' methodology. Judging by the estimates 1980-85 computed according to the method applied for the earlier period, the new figures are roughly 1 percentage point higher than the old ones.

Ricardian view that resources employed in the defense sector are underproductive and therefore are a trammel on growth because of diminishing returns. They argue that high levels of defense spending imply high burdens of defense, and contend that if military expenditures were reduced, resources could not only be freed for better purposes, but would display higher productivity in civilian use. Military modernization they claim is the arbiter of aggregate performance. Increasing arms procurements necessarily reduces the level and rate of growth of GNP, decreasing it enhances consumer welfare.

The argument is plausible, but incomplete. The statistics in Table 3, column 1 reveal that the productivity structure of the Soviet economy is inconsistent with the Ricardian prediction. Instead of displaying the lowest productivity growth, the military machinebuilding sector actually exhibits the highest rate of technological progress in the economy. This means that if Gorbachev attempts to curtail military modernization, he will discover much to his dismay that aggregate growth will decline, rather than increase. Indeed, the absolute productivity differentials suggested by the statistics are so large, that GNP might actually fall absolutely.

This finding at first glance appears incongruous, but further reflection shows that it is consistent with the dual character of the Soviet economic system. As is widely

Table 3

Technological Progress in Selected Soviet Industries 1974-82
(Solow-Ambramowitz Residuals)

Sector	R (1)	dY/Y (2)	dK/K (3)	dL/L (4)
Electric Power	2.72	4.63	5.94	1.20
Fuels	-0.42	2.89	8.21	1.07
Ferrous Metals	-0.12	1.93	6.35	0.24
Chemicals	2.23	6.00	8.77	1.41
Machinery and Equipment	3.83	7.86	9.00	1.69
Military Machine Building	4.88	9.54	10.73	2.02
Construction Materials	-0.06	2.65	6.39	0.98
Light Industry	0.52	3.00	6.63	0.52
Food	0.16	2.42	5.71	0.64

Sources: Rosefielde, Annotated Compendium of Soviet Economic Statistics 1950-80; Narodnoe khoziaistvo, 1982, pp. 117, 127, and 131; Rosefielde, East-West Trade and Postwar Economic Growth, SRI, 1976, p. 59. Rosefielde, False Science: Underestimating the Soviet Arms Buildup, Second Edition, Appendix 8, note 34.

Method: $$R = \frac{dY}{Y} - \alpha \frac{dK}{K} - \beta \frac{dL}{L},$$

where $\alpha = .32$ and $\beta = .68$. The coefficients are factor shares derived from the 1966 Soviet input-output table, with capital services computed at a 12 percent annual rate of interest.

understood, resources including skilled personnel, investment, science and RDT&E are allocated on a priority basis to defense ina command economy. It is reasonable to suppose therefore that embodied technology and management in the weapons sector are superior, and are rapidly improving; inferences that are supported by Gorbachev's repeated calls for the military industrial sector to share its knowhow with the civilian economy.

The defense sector thus does not appear to be the principal cause of the Soviet economy's woes. The roots of its failure lie more deeply in the command system itself. Part of the problem may simply be perverse priorities. If the best resources were transferred to civilian activities, perhaps their productivity would rise. But there are scant ground here for optimism. Much of the productivity advantage of the military machinebuilding sector is built into the capital stock and is not readily transferable to civilian product lines. Moreover the Ministry of Defense knows its own mind. The weapons it procures serve its ends. Consumer demand by contrast has no impact on product supply in the Soviet economic system and provides no impetus to efficient resource use. It is therefore extremely likely that if Gorbachev chooses to abandon Brezhnev's dual track policy, he will accomplish little. Instead of ruling a nation with an inferior standard of living, and superior national security, he will marginally improve the quality of life at the expense of the Soviet Union's status as a great power.

Perestroika

Small, or even moderate improvements in Soviet growth prospects brought about by Gorbachev's program for radical economic reconstruction (perestroika) are unlikely to alter this picture. As previously argued, so long as Soviet economic performance remains broadly within the bounds of recent experience, marginal economic changes should not significantly affect national security policy.

Perestroika however could affect opportunity costs; that is, the relative productivity of the military and civilian sectors and hence hasten or retard military modernization. It is premature to draw any conclusive judgments, but several key reforms bear watching. First, the government could introduce competitive market incentives in the consumer sector allowing enterprise managers not only to maximize profits, but to set their own product prices and determine their own investments in accordance with the forces of supply and demand. This reform would raise civilian productivity and increase the benefits of transferring resources from military to civilian use. Second, Gorbachev could extend this initiative by making the ruble partially convertible, opening the domestic economy to foreign civilian commercial stimuli that would bolster the attractiveness of his non-military option. The Soviets have publically endorsed this goal and announced in late December 1988 that they were initiating trial foreign exchange auctions that could bring it to fruition.

Alternatively, reforms of these sorts could be structured in the opposite way so that their primary beneficial impact would be on defense. Much therefore depends on Gorbachev's real priorities. Although the Soviet economic system, and the prevailing structure of opportunity costs continue to facilitate the Brezhnevian dual track strategy, perestroika could reverse this incentive if Gorbachev is prepared to embrace market socialism. At times he has shown signs of doing so, but has not been consistently resolute. Until he does, however it is difficult to see how he can forego the benefits of rapid arms modernization without the prospect of an adequate quid pro quo.

Force Structure

The likelihood that inertia will triumph over audacity is increased by the availability of a less risky alternative.

Gorbachev can simultaneously modernize his armed forces, and divert resources from defense to the civilian economy by reducing readiness, and cutting troop deployments. While the productivity of the military machinebuilding sector is superior, excess deployments are clearly a deadweight burden on the economy. The diversion of a half million conscripts from the military to industry should increase real output; enhancing investment, and consumption, and providing additional material inputs to the weapons sector. Curtailment of foreign deployments (Afghanistan), unnecessary naval tending (in the Soviet Pacific), and other elements of readiness should have the same positive effect. As a consequence, Gorbachev can exploit the opportunities created by the prevailing pattern of domestic factor productivity to pursue the Brezhnevian dual track national security agenda, while partially placating disaffected civilian constituencies. This approach which parallels Khrushchev's actions after the 20th Party Congress in 1956, requires Gorbachev to sacrifice some options in the short run, but provides ample long term compensation. It permits him to exchange readiness for Western force concessions, to increase GNP and accelerate military modernization without adopting market socialism.

Rush to Judgment

Although the productivity structure of the Soviet dual economy clearly facilitates this Khrushchevian gambit, many scholars who previously counciled against America's competitive strategy and for unilateral Western concessions have chosen to look the other way arguing on economic and military grounds that Gorbachev's declaratory policies provide a window of opportunity that must not be allowed to elude our grasp. They have contended that while Gorbachev's new thinking is sincere, it is nonetheless vulnerable to precisely the kind of economic failures that have emboldened him to consider substituting guns for butter. As a

consequence, it is suggested that the West should assure the success of his program by quickly agreeing to Soviet nuclear and conventional arms proposals, and by providing material assistance in the form of tariff reductions, credit and aid.

This advice has considerable superficial appeal, but is flawed on all grounds. As already has been shown, the sincerity of Gorbachev's intent is impugned by the level and trend of Soviet arms production. His alleged motivation is similarly suspect. While he has sometimes spoken of an economic pre-crisis, and used this imagery to urge the rapid implementation of his programs, neither official, nor CIA estimates validate his claim. Both the GNP statistics reported in Table 2, and counterpart per capita consumption data reveal that the Soviet standard of living is rising, albeit at an unsatisfactory rate. This inference is corroborated further by his revealed priorities. Although, fears of a looming economic catastrophe purportedly are pressing him to cut military spending, glasnost' has consistently taken precedence over the implementation of perestroika. If economic causes were as potent as they are often alleged to be, these priorities surely would have been reversed.

It follows directly that to the extent a window of nebulous opportunity exists at all, there is no urgency to jump through it. In the fullness of time, deteriorating economic conditions might compel the Soviets to abandon the Brezhnevian dual track policy, and to take steps which might allow the Soviets escape what Gertrude Schroeder calls the "treadmill of reform." The day might even come when the Soviets substantially restore capitalism and institute multi-party democracy. But few serious specialists anticipate that this transformation will be completed anytime soon, or believe that it is wise to wager Western national security on perestroika's prospects for success.

Tempting Fate

American national security for nearly three and a half decades has been predicated on deterrence and diplomacy. We too have followed a dual track policy, but unlike the Soviets long ago abandoned the effort to attain superior nuclear and conventional power to make the use, or the threat of use of conventional offensive military force viable. Our policy instead has focused in principle on maintaining a cost effective, sufficient deterrence capability based on a robust strategic triad, adequate NATO conventional counterforce, and diplomatic initiatives of diverse sorts aimed at fostering peace and commercial prosperity.

"New thinking" provides us with an opportunity to fruitfully employ this time proven bipartisan approach to sufficient deterrence in a novel environment. If Gorbachev's actions match his declaratory policies, we may be able to preserve sufficient deterrence at lower cost, improve the climate of East-West relations, spur peaceful Soviet democratic market socialism, and enhance our collective material well being. Alternatively, if Soviet declaratory policy is deceptive, or merely inoperative, patient application of the dual track principle will prevent Western security from being debased.

A lucid appreciation of the merits of our policy is especially important at this juncture because some scholars are counciling a strategy that could enable us to seize defeat from the jaws of victory. They advise a strategy of generous concessions and minimum deterrence, often suggesting that American strategic nuclear forces be reduced to 1,000, 500 or even 200 weapons on the premise that Gorbachev is offering us a window of opportunity.

This advice should be rejected on military and economic grounds. On one hand, it compromises the triad, places excessive reliance on conventional forces and undermines stability without

plausibly augmenting deterrence; on the other it is premised on spurious theories of Soviet economic performance, performance potential, and economic-political linkage. The record clearly shows that despite promising proposals to pare the threatening size and configuration of their forces, the Soviets are continuing to modernize and augment their capabilities. Under these circumstances while it is wise to explore Gorbachev's initiatives, it would be imprudent to tempt fate either by accepting the advice of those counciling haste, or to risk destabilization for the siren call of minimum deterrence.

Conclusion

Mikhail Gorbachev has launched a carefully orchestrated campaign to persuade the West that he intends to abandon Brezhnev's dual track national security strategy in order to build a prosperous, democratic, communist society. To the extent that he is sincere, this is welcome news. National intelligence data on Soviet weapons production and uncertainties about the status of weapons that have been procured but not deployed cast serious doubt on his motives. Moreover, it has been demonstrated that the character of the Soviet economic system, and the prevailing structure of opportunity costs greatly impede a successful transition to a civilian oriented regime, even if Gorbachev desired to move in this direction. Theory teaches that these obstacles could be eliminated through well designed radical reforms, but the preponderance of the evidence suggests that the Soviets are reluctant to make the necessary changes. Moreover, Gorbachev has a viable alternative. Like Khrushchev before him, he can reduce readiness and cut troops in the short run taking advantage of prevailing opportunity costs to increase GNP, accelerate military modernization and obtain Western disarmament

concessions without adopting market socialism. As a consequence, while Gorbachev could surprise skeptics by drastically paring arms procurements and implementing perestroika, it is more likely that he will adhere to Brezhnev's dual track strategy, with tactical modifications that diminish the immediate threat, but augment future Soviet military potential. The appropriate Western response in the face of these realities is the patient application of our own dual track strategy. We should cautiously explore all of Gorbachev's proposals and adjust our forces where appropriate, but should steadfastly resist calls for undue haste, and minimum deterrence which are apt to degrade stability with no measurable gain in Western security.

SOVIET STUDIES, vol. XL, no. 2, April 1988, 222–244

THE SOVIET ECONOMY IN CRISIS: BIRMAN'S CUMULATIVE DISEQUILIBRIUM HYPOTHESIS

By Steven Rosefielde

Igor Birman contends that the Soviet Union is an economy of shortage, in acute disequilibrium, on the verge of a crisis that could have dire political and military consequences.[1] His views differ sharply from those of most professionals who believe that although the Soviet economy is relatively inefficient, it nonetheless can continue to grow at an acceptable rate, supplying the leadership with the goods it prefers.[2] Are there compelling theoretical and empirical reasons for believing that Birman might be right? This essay attempts to assess the weight of the evidence.

Framework

The matrix of information and theory from which Birman draws his inferences is broadly familiar. The Soviet economy is perceived as a centrally planned, bureaucratically administered regime with state ownership of the means of production. Private economic activity is highly restricted and most forms of competitive behaviour are proscribed among state enterprises. Firms are prohibited from competing for market share and most prices are fixed by the state price committee. Most workers have job choice. Non-labour factors are partly rationed and production is determined by administrative plan directives and bonus incentives. Firms are self financing under khozraschet and credit is restricted. Finished goods are distributively rationed through the material technical supply system to retail outlets where they are marketed to households. Consumers are permitted to choose the products they prefer within the constraints imposed by their budgets and available supplies. Access to consumer credit is extremely limited. In short, Birman embraces the widely held view that the Soviet Union is a command economy.

His assessment of the consequences of these arrangements is also largely conventional. He believes that the regime's non-competitiveness has made it technologically backward, that rationing causes factors to be misallocated and that production is unresponsive to consumer demand. These problems, he contends, are mitigated in the military sector by its priority access to technology and scarce inputs, and by the impact of the Ministry of Defence's preferences on weapons supply, but he asserts that the Soviet economy generally is both underproductive and economically inefficient.

None of this is extraordinary. What really sets Birman's work apart is his appraisal of the magnitude of Soviet underproductiveness, the immutability of the system and its degenerative potential.

Consumption

Birman's point of departure is the disparity between the economic performance predicted by the command model and the behaviour suggested by Western estimates, especially those of Abram Bergson and the US Central Intelligence Agency.[3] He maintains that their calculations overstate the performance of the Soviet civilian economy and understate Soviet military expenditures. He contends that Soviet GNP is far lower than commonly supposed, and that growth has been substandard in all sectors other than defence.[4]

In formulating his case Birman invokes all of the usual arguments about the inconsistency and unreliability of Soviet economic statistics, but his assessment is really driven by what he considers the gross implausibility of the CIA's estimates of comparative Soviet economic performance. The statistics in Table 1 highlight his concerns. They measure the comparative size of selected Soviet and American economic activities, expressed as the geometric mean (Fisher ideal) of separate ruble and dollar valued calculations.[5] The data indicate that the Soviet Union was the second largest economy in the world in 1980 with a GNP 55% of that of the USA.[6] Per capita consumption is pegged at 36%, while machinery, and construction durables, and defence outlays either approach or exceed US magnitudes.

Birman believes that all these figures exaggerate Soviet accomplishments,[7] and provide a distorted impression of the post-war Soviet growth experience. The increasing trend in the CIA's relative size ratios implies not only that the Soviet economy grew rapidly 1960–80, but that it outpaced the USA in all critical

TABLE 1
COMPARATIVE SOVIET AND AMERICAN GNP
RATIOS AT ADJUSTED FACTOR COST (GEOMETRIC MEANS)

	1960	*1965*	*1970*	*1975*	*1980*
GNP	49	49	55	58	55
Consumption	37	37	40	42	42
Investment	62	62	73	105	99
Machinery	56	62	73	92	85
Construction	63	61	81	114	113
Defence	—	77	—	124	170
Consumption per capita	32	29	34	36	36

Sources: Imogene Edwards, Margaret Hughes and James Noren (Office of Economics Research, CIA), 'US and USSR Comparisons of GNP', in *Soviet Economy in a Time of Change*, Joint Economic Committee of Congress, October, 1979, Tables A–1 and A–2, pp. 391–2; CIA, *A Comparison of Soviet and US Gross National Products 1960–83* (U), SOV–84–10114, August 1984 (S).

Data: The underlying statistics are valued initially in 1970 rubles and 1976 dollars. The defence ratios are taken from the Edwards articles, nondefence ratios from the CIA monograph.

Metric: The statistics displayed above are expressed in percentages. The ruble defence series is valued at adjusted factor cost; the others including GNP are computed at established ruble prices.

Note: The CIA's latest estimate of comparative Soviet and American defence expenditures in 1980 differs from the figure shown above. See *A Comparison of Soviet and US Gross National Products 1960–83*.

areas including consumption, investment durables and defence. This seems incredible to him, and he has attempted to confirm his suspicions by conducting a detailed investigation of the CIA's consumption estimates. His calculations lead him to conclude that per capita consumption in 1980 is more like 20–25% of the US level than the 36% the Agency (and Gertrude Schroeder) claim,[8] and that the growth of Soviet per capita consumption during the 1970s was slower than in the USA.[9]

The evidence adduced to support these conclusions is difficult to summarize. The alleged overstatement of the level of Soviet consumption is attributed partly to the CIA's and partly to the Soviet overgrading of their products in terms of quality.[10] It may also be due to the undergrading of US goods (valued in rubles), and other deficiencies in American growth statistics.[11] The broad plausibility of Birman's contention, however, can be established by reconciling his statistics with the CIA's and Bergson's. This is accomplished first by deflating the agency's per capita consumption comparative size statistics with an unweighted composite index of three hidden inflation indexes reported by the CIA in *USSR: Measures of Economic Growth and Development 1950–80*, adjusted for the

TABLE 2
SOVIET AND AMERICAN CONSUMPTION COMPARISONS VALUED AT ADJUSTED FACTOR COST, CORRECTED FOR HIDDEN INFLATION
(BILLIONS OF 1976 DOLLARS AND RUBLES)

	Rubles				*Dollars*			
	1955	*1965*	*1975*	*1980*	*1955*	*1965*	*1975*	*1980*
I. Consumption								
USSR	113·2	151·8	220·0	247·9	258·0	353·1	500·9	569·0
USA	414·7	569·5	759·0	915·9	560·9	806·6	1,123·3	1,342·9
II. Population (millions)								
USSR	194·4	229·3	253·3	264·5				
USA	165·9	196·6	216·0	227·7				

	Geometric Means			
	1955	*1965*	*1975*	*1980*
II. Consumption per capita	30·2	29·2	30·7	29·2

Sources: 'US and USSR: Comparisons of GNP', Table A–1 and A–2, pp. 391–2; and Table A1, column 5, this paper. *Narodnoe khozyaistvo* various issues and *Statistical Abstract of the United States*, 1986, p. 5.
Method: Soviet consumption is deflated to 1955 based on the premise that the volumes reported by Edwards et al. are distorted by hidden inflation. The dollar values are adjusted proportionately on the assumption that hidden inflation is accomplished by overclassifying goods in higher quality categories. The CIA's implicit adjusted composite hidden inflation index is used to deflate consumer goods. (Table A1, column 5).
Comment: The per capita unadjusted geometric means in the CIA's 1979 and 1984 studies differ slightly. For example, the figure for 1980 according to Edwards is 36·8, in the later study 36·0. The 1979 series is valued at adjusted factor cost, the 1984 series uses established ruble prices.

specific deflation allowance embodied in its consumer goods sub-series (see Table A1). This approach has obvious shortcomings because we do not really know the true rate of hidden inflation in the consumer sector, but it is instructive for the purposes at hand. The adjusted comparative size statistics displayed in Table 2 demonstrate that per capita consumption could have been 29·2% instead of 36% of the US level in 1980; that a figure of 29·2% is broadly consistent with Bergson's estimate for 1970, and that American per capita consumption growth could have surpassed the Soviet rate during the quarter century 1955–80.[12]

The margin of per capita consumption growth superiority achieved by the USA according to these measures however is slight. The statistics displayed in Table 3, rows I1.b and II indicate that per capita American consumption growth 1960–80 exceeded the Soviet rate by 0·4 percentage points; 2·5% as against 2·1% per annum. Further adjustment reducing the comparative size statistics to the upper level of Birman's 20–25% range (Table A2) increases the differential to 1·3 percentage points,[13] with per capita Soviet consumption 1960–80 growing at a modest 1·2% per annum (Table 3). This result, which requires an overall hidden inflation rate 1·5 percentage points higher than the CIA's composite estimates, if correct obviously places Soviet consumption performance in a relatively unfavourable light, but does not imply a crisis threatening deterioration in the standard of living. It serves instead as a precondition which, together with collateral evidence on the declining trend in per capita consumption growth, provides a credible foundation for Birman's complete crisis theory.[14]

TABLE 3
SOVIET AND AMERICAN PER CAPITA CONSUMPTION GROWTH 1960–80
(Compound Rates: % Per Annum)

Produced Aggregate Consumption	*1960–65*	*1965–70*	*1970–75*	*1975–80*	*1960–80*
I. Soviet					
1. CIA					
a. Reported	2·1	4·3	2·6	1·6	2·7
b. Adjusted	1·5	2·5	2·9	1·6	2·1
2. Birman	1·1	1·8	1·4	0·7	1·2
II. USA	2·8	2·7	2·0	2·6	2·5

Sources: CIA, *USSR: Measures of Economic Growth and Development 1950–80*, Table 3, p. 22 and Table A10, p. 75; and Tables 2 and A1, this paper.
Method: The CIA's Soviet per capita consumption statistics in panel I.1a which are implicitly deflated by the sample techniques used to derive them, are deflated further in panel I.1b by the unweighted, adjusted composite hidden inflation price index in Table A1, column 5. The Birman series is computed similarly, except that the unadjusted composite index in Table A1, column 4 is applied. This index, used in conjunction with Edwards' purchasing power parity data, generates a USSR/USA geometric mean of 25·5%, in line with Birman's assertion. (See Table A2).
Comment: The CIA's per capita consumption statistics used in its GNP series grow 0·5 percentage points faster than its estimate of real per capita consumption purchases 1960–1980. Cf. *USSR: Measures of Economic Growth and Development 1950–80*, Table A10, p. 75 and Table 6, p. 335.

Defence

Birman's assessment of the scale of Soviet military expenditures, which he interprets as a burden on potential civilian production, is also plausible. He estimates that defence outlays account for approximately 20% of GNP.[15] This figure is obtained by adjusting the CIA's GNP statistic downward to correct for its overestimation of consumption and other non-defence outlays, and by modifying the agency's defence data to adjust for the undervaluation of military goods.[16] The first adjustment increases the CIA's defence burden estimate by 4.3 percentage points, from approximately 12·0% to 16·3% in 1980 (Table A4). The difference between the latter figure and Birman's estimate of 20% is attributable to underestimated defence outlays, and could imply that Soviet military expenditures 1970–80 grew faster than the CIA warrants.[17] The differential is substantial but, as the data in Table 4 indicate, is fully consistent with official Soviet production statistics. Birman's assessment of the scale of Soviet defence activities, like his appraisal of per capita consumption, is broadly within the bounds of feasibility. His crisis theory therefore passes a basic test.

TABLE 4
GROWTH OF DEFENCE OUTPUT 1955–80 BY SECTOR OF ORIGIN

	1955	*1960*	*1965*	*1970*	*1975*	*1980*
I. Outlays						
Industry	4·6	8·2	14·4	24·7	43·0	64·0
Machinery	2·2	4·3	8·3	16·2	31·4	50·6
Fuel	1·0	1·4	2·0	2·6	3·3	3·8
Electric power	0·2	0·3	0·5	0·8	1·1	1·4
Metals	0·7	1·1	1·7	2·2	2·8	3·1
Chemicals	0·1	0·2	0·4	0·7	1·2	1·5
Construction materials	0·4	0·9	1·5	2·2	3·2	3·6
Construction	0·8	1·3	1·7	2·2	2·9	3·3
Transport	1·2	2·1	3·3	4·5	6·2	7·3
Communications	0·2	0·2	0·3	0·5	0·7	0·9
Trade	0·4	0·6	0·7	1·0	1·3	1·5
Services	4·5	5·4	6·7	8·2	9·7	11·1
Military personnel	7·4	5·6	6·3	7·4	8·0	8·3
Total Defence	19·1	23·4	33·4	48·5	71·8	97·4
	1955–60	*1960–65*	*1965–70*	*1970–75*	*1975–80*	
II. Growth						
Industry	12·3	11·9	11·4	11·7	8·3	
Military personnel	−4·5	2·4	3·3	1·6	0·7	
Total defence	4·1	7·4	7·7	8·2	6·3	

Sources: Rosefielde, *Economic Foundations of Soviet National Security Strategy*, manuscript, Table A10.2 and Table A10.4.
Method: Soviet defence expenditures in 1970 are allocated to their sectors of origin and extrapolated at official Soviet rates of industrial growth. Weapons in the machinery sector are extrapolated with an adjusted non-civilian machinery sub-series.

The statistical series he employs to shape his ideas are compatible with official Soviet data, and the sorts of adjustments made to them by the CIA.

Degeneration

Birman's statistics, like those of the CIA, display an unmistakable dynamic.[18] The growth rate of per capita consumption, investment, industrial output, and GNP all steadily decline 1960–80. Should these trends persist, as CIA data for the quinquennium 1980–85 indicate, they clearly portend eventual economic prostration.[19] In this respect, it makes little difference whether Birman's or the CIA's per capita consumption statistics are right. Both point to the same ultimate outcome. Birman and the agency do disagree however on one fundamental issue. The CIA interprets the long run deceleration as growth retardation.[20] It believes that economic growth will decline to an asymptotic, natural long-term rate well below that of the USA but positive enough for the USSR to 'muddle through'.[21] Birman takes an opposing view. He contends that per capita consumption growth has or soon will become negative,[22] and he concludes that this will culminate in a general economic crisis. For the CIA the Soviet Union is a waning economic power;[23] for Birman it is a regime on the threshold of collapse.

Birman defends his reading of the evidence on diverse grounds. He argues that the economic decline is likely to persist because the Soviet Union has no viable investment alternatives. The marginal productivity of capital has incontestibly fallen, regardless of whose statistics are invoked, suggesting that major new investment initiatives will not reverse the secular trend.[24] Traditional strategies for reinvigorating the economic system, including liberalization, he believes hold little prospect for success due to the economy's ossification and decay.[25] Radical structural reform cannot be ruled out, but is deemed improbable.[26]

Birman's appraisal of Soviet transfer options with respect to defence are similarly pessimistic. He doubts that resources can be diverted from military to civilian activities in significant quantities, and even if they were, they would only afford a temporary respite.[27] As long as the underlying trend in per capita Soviet consumption growth endures, the Soviet standard of living must decline relatively and absolutely, albeit from a higher level, after lump sum military transfer possibilities have been exhausted.

Disequilibrium

The degeneration of the Soviet economic system Birman envisages has many specific causes: inherent underproductivity, static inefficiency, deficient technological innovation and diffusion, financial disarray, hyper-bureaucratization, worker alienation, etc. Although each is distinct, they can all be reduced to a single prime cause, the intrinsic disequilibrium of command regimes.

The Soviet economy is in a state of fundamental disequilibrium because supply is not globally responsive to final purchasers' demand. Household

preferences have virtually no direct effect on prices, or enterprise output, and even where production is customized supply responses are distorted by faulty success indicators and impaired by arbitrary constraints. As a consequence, the Soviet Union is an economy of shortage.[28] A vast array of goods desired by the population are not produced at all, or are available in insufficient quantity even though purchasers have the means to pay. In a market economy excess demand would prompt prices and quantities to adjust until equilibrium was restored. Under Soviet circumstances, however, this cannot occur because the leadership does not know and consumers have no effective way of revealing their preferences. Excess demand therefore is repressed instead of being automatically alleviated. Prices are held down by the state price committee, and consumer wants are ignored, perpetuating shortages and causing widespread waste.

Birman understands that this fundamental disequilibrium does not in itself necessarily cause negative per capita consumption growth. Technological progress could enable the volume of consumer goods to grow without diminishing excess demand because money incomes could expand at least as rapidly as consumer supplies. He discounts this possibility, however, contending instead that the cumulative effects of protracted disequilibrium sap the system's vitality, propelling it into inevitable decline.[29]

Birman's hypothesis thus satisfies another significant test: it is logically consistent. Starting with the analytically sound premise that the Soviet economy is in a state of fundamental disequilibrium, he conjectures that its cumulative effects could well be profoundly degenerative, causing a decline in the standard of living that culminates in a system-wide crisis. He substantiates the key proposition that the cumulative effects of disequilibrium are undermining its vitality statistically with plausibly adjusted data on postwar Soviet economic growth trends and then deduces the consequences accordingly on the reasonable premise that underlying sources of disequilibrium will persist.

Birman-type theories of Soviet economic crisis

Birman's concept of cumulative disequilibrium provides an intuitively appealing explanation of the causal forces that could initiate an economic crisis in the Soviet Union, but he does not elaborate the specific events precipitating the crisis, how it is likely to unfold, or be resolved. Many possibilities exist. The government could trigger a panic by abruptly raising prices to alleviate repressed inflation;[30] productivity could plummet because workers were demoralized, or the economy might be paralysed by bureaucracy and corruption. Likewise the crisis might be localized, or global, and might culminate in collapse or fundamental reform.

The validity of Birman's concept thus does not settle the ultimate outcome, and for this reason in considering the cogency of his hypothesis it is useful to recognize that it pertains to a class of theories, rather than a unique causal model. In the subsequent sections of this article primary attention will therefore be focused on evaluating the theory and evidence sustaining the hypothesis that cumulative disequilibrium is driving the Soviet economy toward a crisis. If

Birman's case is shown not only to be plausible, but cogent as well, it will lend credence to a wide range of cognate theories on the destiny of the Soviet economic system. If it is found wanting, these related conjectures should be interpreted accordingly.

Controlled disequilibrium

The power of Birman's theory of cumulative disequilibrium turns on the effects the excess demand mechanisms governing factor allocation, production and distribution have on the productivity of the system. These effects can be investigated by analyzing the properties of the supply and demand functions characteristic of each activity, and by studying the supply behaviour they entail.

The essentials are most readily grasped by beginning with production. Output demand as it is perceived by producers in the Soviet Union is determined by plan directives, exhortations for above plan deliveries, and the parameters of producers' bonus incentive functions. All three sources of effective demand direct managers to produce at or above their economic capacity, understood here as the activity level that would prevail in a Pareto efficient enterprise with exogeneously constrained inputs. As is widely recognized, production plans tend to be 'taut', or 'over-taut', and the parameters of managers' incentive functions, such as prices and reward rates, encourage them to achieve above plan results. Producer supply, given the objective state of demand, depends on penalties for non-compliance and the reward function. Managers motivated by their fears and pecuniary interests are driven to utilize the factors at their disposal in a technically efficient manner.[31] Inputs are combined in nominally optimal proportions, at the appropriate levels of intensity.

Excess demand, in the Marshallian sense in which the demand price exceeds marginal supply cost at the observed level of production, occurs pervasively in the Soviet Union because input restrictions prevent managers from expanding output to the bonus indicated maximum. The shortages that arise in this way are almost entirely illusory. They are neither caused by inefficient, intra-enterprise technical input use, nor by managerial failure. They occur because the demand price is deliberately set by the authorities at a level that warrants overfull resource utilization beyond the economy's capabilities. As a consequence, excess demand in the production sphere is fostered, not repressed, and manifests itself in overproduction, not underproduction, viewed from the standpoint of the disequilibrium factor prices at which inputs are supplied.

This interpretation of course does not mean that observed economic capabilities exhaust enterprise potential. Output might be augmented by adjusting wage structures, enhancing worker participation, etc.[32] Likewise, demand that appears excessive may not be so because of the ratchet effect which in essence reduces the nominal demand price. But these refinements do not alter the fundamentals. Pervasive excess demand prompts Soviet enterprises to produce near or above their rationing-constrained competitive economic capacity,[33] with relatively small reserves.[34] As Birman himself acknowledges, cumulative disequilibrium does not manifest itself importantly through enter-

prises underutilizing their resources or *de facto* capabilities, and therefore cannot be identified as a primary cause of Soviet economic decline.

The root of the problem therefore must be sought elsewhere, most probably in the activities that determine the quality, volume and distribution of factor supplies. The effective demand levels for factors are functions of plan-directives and price related parameters. They are derived from managers' desired levels of supply. Since, as has already been shown, managers typically wish to produce at or above their enterprises' economic capacity bounds, it follows that factor demand is equal to, or greater than the level that would prevail in a competitive market regime, unencumbered by input rationing.

The supply of factors equations are also functions of plan directives and prices. Non-labour factors, including intermediate inputs and capital durables, are produced and/or distributed in response to excess price incentives and directives until they are resource constrained, or depleted. Under conditions of generalized excess effective demand, non-labour factor availabilities are limited by constraints on their past and current production, not by ownership and/or related utilitarian concerns.

This process of supply determination, however, does not extend to the labour market. Labour demand, like non-labour demand, is derived from desired levels of product supply, but wages are not set above reservation levels in the same way prices are constructed to ensure that non-labour marginal value products exceed their rental prices at observed levels of production. As a consequence, with supply established by obligatory work laws and wages, labour is normally not in a state of shortage.[35] The labour participation rate exceeds the competitive norm because more people are compelled to work than would voluntarily offer their services at the going wage.[36]

This structural involuntary excess supply illuminates an important aspect of the underproductivity of the Soviet economic system because it explains on neoclassical grounds precisely why labour effort should be sub-standard. It also provides potential support for Birman's cumulative disequilibrium hypothesis, because if real wage rates are gradually eroded effort and labour productivity will decline with them.[37]

Similar productivity dampening tendencies manifest themselves in Soviet retail markets. Given the prevailing distribution of purchasing power, and privileged access, final public and private demands can be specified as single-valued functions of output prices. Supplies too are partly responsive to prices, but their influence is muted by the turnover tax mechanism, and their allocation to retail outlets is dominated by rationing. Demand and supply under these circumstances are seldom balanced either from the standpoint of consumer choice or consumer sovereignty, causing the achieved level of welfare to fall greatly short of potential. These efficiency losses are incurred whether or not the retail market is nominally cleared in the aggregate, and no automatic adjustment mechanisms of significance exist to mitigate them. As a consequence disequilibrium persists in the retail market, dampening effort by depressing effective real wages.[38]

Structural misallocation likewise is endemic in factor markets. Non-labour

primary and intermediate factor supplies are arbitrarily rationed, diminishing productivity absolutely and relative to international norms.

It may thus be concluded that the Soviet economy operates in a state of severe and persistent disequilibrium which diminishes labour effort and non-labour factor productivity. No theoretical evidence however has been adduced to suggest that the system is dynamically unstable. Non-labour factors are overfully employed and utilized in a technically efficient manner within enterprises. Achieved levels of production do not appear to be jeopardized by multiplier/accelerator or other types of destabilizing interactive effects. With the possible exception of the labour market, the Soviet economy appears to be in a state of controlled disequilibrium.[39] It is a debilitating condition, but not one that is inherently degenerative.

Growth potential

The dynamic implications of controlled disequilibrium are especially interesting. First and foremost, the excess demand mechanisms in the product and non-labour factor markets place a floor under Soviet growth deceleration. GNP growth may converge asymptotically toward zero, but it is unlikely to become significantly negative. The concept of cumulative disequilibrium is misleading in this regard. It suggests that the pressure caused by disequilibrium is intensifying, placing the system under increasing stress, and threatening its viability. In reality cumulative disequilibrium restrains productivity, but does not necessarily cause it to deteriorate. This of course does not mean that negative growth could not occur, only that it is unlikely on technical grounds.

The most plausible cause of negative growth, should it arise, is intensified involuntary excess supply conditions in the labour market. Any diminution of real wages brought about by curtailments in consumer goods production, or fiscal and monetary policies that have the same effect, will for the usual reasons reduce effort and output. Counterproductive actions of these sorts, however, are not endogenous aspects of persistent disequilibrium. They are policy determined, and are easily controlled if the authorities possess the requisite political will.

Thus contrary to Birman's intuition, persistent economic disequilibrium is not a sufficient condition to make negligible or negative growth likely on neoclassical grounds. The growth potential of the Soviet system is undoubtedly impaired by allocational and coordinative economic inefficiencies, but this drag must be weighed against the opportunities afforded by technological backwardness. As is generally understood, the principal sources of long-run economic growth are improvements in skills and technology. The Soviet Union may not be able to enhance productivity significantly by reducing disequilibrium, but so long as disequilibrium is controlled it can steadily increase aggregate output by drawing on the opportunities provided by domestic and foreign technological innovations.[40] It merely needs to re-equip its industries, farms and institutions with better technologies, and imbue its blue and white collar workers with the skills required in modern productive environments. It can be counterargued that

modernization is more easily said than done; that it will be impeded and degraded in myriad ways and positive results will be minimal in the end. Perhaps, but there are no compelling theoretical reasons to suppose that this pessimistic assessment will be validated. It could just as easily come to pass that the Soviet Union continuously expands production of goods no one really desires *ad infinitum*.

Adaptation

The likelihood of the latter scenario is increased when adaptivity is taken explicitly into account. This term refers to the ability of the Soviet leadership to respond to changing circumstances through diverse policy initiatives and reforms. A few examples will suffice to establish the basic principle. In line with Birman's modeling, suppose that real wages were dysfunctionally low. Disequilibrium could be reduced by resource transfers to and increased investment in the consumption sector, by modernisation of product lines, importation of foreign consumer goods,[41] and advertising aimed at enhancing demand for products in surplus supply. If the public's disposable money income were excessive, inducing frustrated consumers to curtail work effort, the problem could be resolved by selectively increasing prices, varying product mixes, increasing money wages less rapidly than the growth of consumer goods, compulsory purchases of non interest bearing bonds, taxes and other confiscatory measures. If growth were decelerating because factor allocation and investment were increasingly unresponsive to enterprises' needs, competitive exchange arrangements including negotiated prices could be introduced in the state sector to replace rationing and bolster productivity. Adaptive measures of these sorts may not be utilized, but if they are not the negative growth this failure may occasion is attributable to the ineptitude of the leadership, not to the inevitable consequences of cumulative disequilibrium.[42]

Likelihood

The concepts of controlled disequilibrium and adaptivity delineate the limitations of Birman's hypothesis, but do not disprove it. A crisis could materialize if the system's directors adopted misguided policies that caused per capita consumption to decline, if effort became highly responsive to declining real wages, and if the regime's adaptive possibilities were thwarted. The fundamental issue, therefore, is not whether crises are thinkable in Soviet-type economies, but whether they are likely under prevailing Soviet conditions.

The likelihood of an economic crisis can be evaluated by considering the uncertainties affecting Birman's model. Three factors deserve explicit attention: the probability that Birman's per capita consumption estimates are accurate; the conditional probability of effective adaptive policy action; and the conditional probability of an economic breakdown, given a protracted deterioration in the Soviet standard of living. The first factor poses the least difficulty. It is generally accepted that although Soviet economic statistics are not freely invented, they

do overstate actual achievements. The precise magnitude of this bias is indeterminate, but following Bergson it is conventionally assumed that reasonably reliable estimates can be computed in accordance with Western accounting definitions from disaggregated official data. In the present context, this approach generates estimates which imply that per capita Soviet consumption is growing by 1·5% per annum, a rate well above the flashpoint, but significantly lower than the American rate of 2·5% per annum experienced 1980–85.[43] This figure can be construed as a central value because it falls between the officially claimed rate and the CIA's estimate computed from physical series that disregard qualitative improvement and hence understate growth.[44] The true rate may lie within or beyond this interval, but is most likely to be in the close neighbourhood of the central value. The further any point lies from the central value, the less likely it is to be correct. Birman's per capita consumption growth rates, as we have already seen, are outliers. They are well below both the Bergsonian mean and the CIA's lower bound estimates.[45] It follows directly on statistical grounds that they are unlikely to be true values. They could be correct, but the odds are against them.

Similarly, the adaptive potential of the Soviet economy partly depends on the performance of its non-consumption sectors. If confidence is placed in the CIA's direct costing methodology (which Birman does not), it could be argued that the Soviet authorities have little leeway because weapons growth since 1976 has already been curtailed to zero without visible positive impact on the standard of living.[46] But, if official non-civilian machinebuilding statistics are accepted the opposite holds and it can be inferred that the Soviet leadership can divert resources from military to civilian use without imperilling its national security.[47] The conditional probability of successful adaptation in the first instance is low, in the second relatively high.

The conditional probability that workers will severely reduce their effort and precipitate a crisis in response to an intractable deterioration in the living standard is also difficult to estimate. Disgruntled workers theoretically should reserve their effort, but they might stoically persevere in the time-honoured Russian tradition.[48]

The joint effect of these three factors is illustrated in Table 5. Columns 1–3 contain sets of hypothetical probabilities for two alternative scenarios: the first assumes that the true per capita consumption growth rate 1980–85 lies in the interval −2% to 0% per annum, and the second that it falls in a range between 1% and 3% per annum.[49] The likelihood of a crisis, reported in column 4, is the product of these probabilities.

Chances for a crisis under the first scenario vary widely. If, as Birman believes, Soviet per capita consumption growth is in the specified interval, with restricted adaptive opportunities and a restive population, a crisis may be imminent. However, any reasonable relaxation of the last two assumptions drastically reduces its likelihood, making conditional predictions extremely uncertain.

Prospects for a crisis under the second scenario are better defined. The probabilities that the workers will significantly reduce their effort, and that the

TABLE 5
THE LIKELIHOOD OF A SOVIET ECONOMIC CRISIS

	Hypothetical Probabilities			
	P_1	P_2	P_3	L
Scenario A (Birman)				
1. High likelihood	1·00	·90	·90	·8100
2. Medium likelihood	1·00	·90	·50	·4500
3. Low likelihood	·50	·50	·20	·0500
Scenario B (CIA–Bergson)	·8	·05	·05	·0002

Definitions:
P_1 is the probability that the true rate of per capita consumption growth lies in the stipulated interval.
P_2 is the conditional probability that the leadership has no adaptive options.
P_3 is the conditional probability that workers will severely curtail their effort.
$L=P_1 \cdot P_2 \cdot P_3$, where L is the likelihood of a crisis.
Assumptions:
Scenario A: per capita consumption growth is between −2% and 0% per annum.
Scenario B: per capita consumption growth is between 1% and 3% per annum.

regime has no room for manoeuvre, with per capita consumption growth greater than 1% per annum, are exceedingly low, so that the likelihood of a crisis must be regarded as remote.

These illustrative computations suggest that Birman's hypothesis is unlikely to be confirmed at prevailing rates of per capita consumption growth, but that any further decline in the CIA's estimates and/or official Soviet series could radically alter the likelihood calculus. If hidden inflation is as rife as the CIA has sometimes alleged,[50] and if the Soviet standard of living really is 20–25% of the American level as Birman contends, a serious test of his crisis theory could be in the offing. Although neoclassical theory and the preponderance of the postwar evidence still militate against this contingency, Birman's critics could soon be compelled to reexamine their theories of the dynamic propensities of the Soviet economic system should aggregate Soviet performance continue to falter.[51]

Technological retrogression

Fresh evidence supporting Birman's position has recently surfaced from two unlikely sources. In his speech to the party plenum on 25–26 June 1987 Mikhail Gorbachev appeared to corroborate the proposition that the Soviet economy in the mid 1980s was in dire straits, official statistics to the contrary notwithstanding:[52]

> It can be said with confidence that the political situation in the country has substantially changed in these two years. The understanding that the restructuring was necessitated by mounting contradictions in the development of society is deepening. These contradictions, gradually accumulating and not being solved in time, were actually acquiring pre-crisis forms.

Likewise the CIA has published new estimates of factor productivity that imply an ominous deterioration in the Soviet technological base. The contribution of technology to aggregate and industrial growth according to these statistics did not just decline between 1980 and 1985 but actually became sharply negative.[53] If correct, these estimates indicate that the Soviet Union is suffering from an acute case of technological retrogression which, other things being equal, could cause a precipitous fall in per capita consumption should Gorbachev attempt to divert resources from investment to non-investment uses.[54]

Limitations of space preclude a serious examination of this suggestive, but oblique new evidence. The rhetorical context of Gorbachev's remarks and the dubiousness of the adjustments and weights that drive the CIA's productivity estimates must be thoroughly scrutinized before a verdict can be rendered.[55] Nonetheless, it is worth observing that a Soviet economic crisis is not unthinkable even in the Kremlin, and that the potential for crisis latent in the CIA's productivity estimates is far more congruent with Birman's theory than the agency appears willing to admit.[56]

Conclusion

Igor Birman contends that the Soviet economy is in an acute state of cumulative disequilibrium that threatens to reduce productivity to the crisis point. He defends this intuition by a loose appeal to standard disequilibrium adjustment mechanics, and with statistical evidence demonstrating decelerating aggregate economic growth and declining relative per capita consumption. Careful analysis has revealed that although he might be right on all scores, neither neoclassical theory nor the preponderance of the evidence at present validate his surmise. It has been shown that the mechanics of excess demand make the achieved level of production stable, and that the Soviet economy has not exhausted available sources of growth, or adaptation. Similarly it has been argued that per capita consumption growth may be more robust than his analysis suggests because the CIA's estimating methodology understates product improvements. Nonetheless, the continued decline in the agency's estimates of per capita consumption growth 1980–85 is disquieting,[57] and raises the possibility that Birman's crisis theory may be put to a test few anticipate. Further declines will probably be checked, but if they are not the foundations of Soviet economic systems theory will have to be searchingly reconsidered.

University of North Carolina at Chapel Hill

TABLE A1
CIA Estimates of Hidden Inflation Based on Physical Sample Data

	Construction	*Industry*	*Consumption*	*Unweighted (unadjusted)*	*Composite (adjusted)*
	(1)	*(2)*	*(3)*	*(4)*	*(5)*
1955	76·3	72·6	84·2	77·7	78·4
1960	80·1	80·6	92·0	84·2	88·7
1965	79·2	88·9	96·8	88·3	91·4
1970	100·0	100·0	100·0	100·0	100·0
1975	103·4	108·0	107·7	106·4	98·3
1980	(105·3)	114·2	113·9	111·3	99·0

Sources: CIA, *USSR: Measures of Economic Growth and Development 1950–80*, Table B–3, p. 87, Table 10, p. 203, Table 6, p. 335. Table A3, this paper.
Method: Tables 6 and 10 were converted to index form, interpolating where required. The three series were then averaged. The missing 1979 and 1980 construction figures were extrapolated from the construction inflation trend 1955–78. The unweighted composite is adjusted by the implicit consumer goods hidden inflation rate derived from the entries in Table A3.
Comment: The CIA's implicit hidden inflation consumption index above is derived from sales data. The consumer goods implicit inflation adjustment is based on the relevant sub-component of its GNP series.

TABLE A2
Soviet and American Consumption Comparisons Valued at Adjusted Factor Cost, Corrected for Hidden Inflation: An Alternative Calculation

(Billions of 1976 Dollars and Rubles)

	Rubles				*Dollars*			
	1955	*1965*	*1975*	*1980*	*1955*	*1965*	*1975*	*1980*
I. Consumption								
USSR	113·2	155·8	201·5	218·6	258·0	362·2	458·6	501·6
USA	414·7	569·5	759·0	915·9	560·9	806·6	1,123·3	1,342·9
II. Population (Millions)								
USSR	194·4	229·3	253·3	264·5				
USA	165·9	196·6	216·0	227·7				
III. Consumption per capita								
(Geometric means)	30·2	29·4	28·1	25·7				

Sources: 'US and USSR: Comparisons of GNP', Table A1 and A2, pp. 391–2; and Table A1, column 4, this paper.
Method: Soviet consumption is deflated to 1955 based on the premise that the quality of the volumes reported by Edwards et al. are distorted by hidden inflation. The dollar values are adjusted proportionally on the assumption that hidden inflation is accomplished by overclassifying goods in higher quality categories. The CIA's implicit unadjusted unweighted composite hidden inflation index is used to deflate consumer goods. (Table A1, column 4).
Comment: The hidden inflation rate, above and beyond the allowances already made by the CIA, used in the calculation above is 1·5% per annum 1960–80. This implies an overall rate of hidden consumption inflation (produced rather than sold) of approximately 2·1% per annum.

TABLE A3
SOVIET PER CAPITA CONSUMER GOODS PRODUCTION: SECTOR OF ORIGIN
(COMPOUND ANNUAL RATES OF GROWTH 1960–80)
(in %)

	1960–65	*1965–70*	*1970–75*	*1975–80*	*1960–80*
Official Soviet	3·6	5·9	4·2	1·6	3·8
CIA	3·5	5·4	2·8	1·0	3·2

Sources: USSR: Measures of Economic Growth and Development 1950–80, Table A1, pp. 53–4. Rosefielde, *Economic Foundations of Soviet National Security Strategy,* Table 9.16. *Narodnoe khozyaistvo,* various issues, and *Statistical Abstract of the United States,* 1986, p. 5.
Definition: Consumer goods pertain to the CIA sub-categories of light, food, and other industrial activities.

TABLE A4
THE SOVIET DEFENCE BURDEN IN 1980 AT 1976 ADJUSTED RUBLE FACTOR COST
(BILLIONS OF RUBLES)

	Consumption (1)	*Investment* (2)	*Defence* (3)	*GNP* (4)	*Burden (%)* (5)
CIA: Reported	313·1	159·8	70·5	587·6	12·0
Adjusted			70·5	431·5	16·3
Birman (implied)			89·9	449·6	20·0

Sources: 'US and USSR Comparisons of GNP', Tables A–1 and A–2, pp. 391–2; and *USSR: Measures of Economic Growth and Development 1950–80,* Table C4, p. 123.
Method: GNP shown in row 1, column 4 is reduced by defence expenditures in column 3, and deflated with the hidden inflation index in Table A1, column 4. Defence outlays are then added back and the burden (column 3÷column 4) computed.
Comment: The adjusted factor cost defence statistic is measured in 1970 rubles which may cause some small distortion. CIA defence statistics for 1980 were revised downward in 1983. See *A Comparison of Soviet and US Gross National Products 1960–83.*

[1] 'In my opinion, the negative growth of productivity starting only at the end of the 1970s marks the beginning of the end of the Soviet economic system. Together with Professor Marshall Goldman, I think that the economy is in a crisis, and, perhaps without him, think that it will continue to deteriorate . . . The crucial question is, what can happen in the future? Or to put if differently, can we expect the Kremlin chieftain will reform the economy? Even if he does (though Gorbachev's speeches indicate no intentions of *real* reforms), the reforms will not save it . . . Summarizing, the Soviet economy will not muddle through; it will deteriorate further'. Igor Birman, 'The Soviet Economy: Alternative Views', *Russia,* 12 (1986), pp. 69–71.

The passages cited above, stressing as they do the concept of irreversible deterioration, give the impression that the consequences of the crisis go beyond slow growth, threatening the system's survival. A close reading of Birman's writings suggests that he may be of two minds on this issue. In 1981 he wrote with regard to the 'crisis': 'Least of all would I want to be understood to be saying that one should anticipate a rapid collapse of the Soviet political system. I do not believe that a substantial transformation of the Soviet regime as such will take place as a result of the further increase of difficulties'. Birman, *Secret Incomes of the Soviet State Budget,* (Martinus Nijhoff, Boston, 1981), pp. 225–6. By 1983 his views became more apocalyptic. 'Protsess snizheniya zhiznennogo urovnya budet neizbezhno prodolzhat'sya, zakhvatyvaya vse bolee shirokie krugi naseleniya. Ochen' sil'nym udarom budet takzhe neizbezhnoe iz "yatie vlastyami denezhnykh nakoplenii. . . . imenno dokazannaya bolee chem poluvekovoi praktikoi nesposobnost' rezhima obespechit' sobstvennomu narodu bolee ili menee dostoinuyu materialnuyu zhizn', ego ochevidnoe bessilie v etom yavlyaetsya samoi glubokoi prichinnoi ego (rezhima) nedolgovechnosti, ego neizbezhnogo budushchego padeniya. He amerikanskie imperialisty i sionisty, ne dissidenty i dazhe

ne pekinskie marksisty, a sobstvennaya ekonomicheskaya sistema yavlyaetsya zleishim vragom rezhima, vragom, kotoryi v kontse ego razrusshit.

Ya uzhe govoril vyshe, chto rezhim v obshchem podderzhivalo i vse eshche podderzhivaet bol'shinstvo naseleniya, no eto nedolgovechno. Nachavshiisya protsess ostanovki ekonomiki, prekrashchenie rosta zhiznennogo urovnya i neizbezhnoe ego snizhenie, neotvratimaya likvidatsiya denezhnykh sberezhenii privedut k ostromu neodovol'stviyu. V kakikh formakh ono proyavitsya—nelegko sudit', no formy eti mogut byt i ochen' zhestokimi, krovavymi.

Stoit vspomnit', chto fevral'skaya revolyutsiya ne byla organizovana revolyutsionnymi partiyami, ona proizoshla, kogda v Petrograde tri dnya ne podvozei khleb'. Birman, *Ekonomika nedostach*, (Chalidze Publishers, New York, 1983), pp. 199 and 208.

'The core of my analysis is that the slowdown will continue and the country will experience negative growth—less and less will be produced. If we just extrapolate this tendency . . .' Igor Birman, 'The State of Soviet Economic Affairs', *Russia*, 11 (1985), pp. 64.

Readers therefore should recognize that although Birman has taken the position that the contradictions of the Soviet economic system will destroy it, together with the Communist party, the state and the apparat, at other times he cautions that these outcomes may not come to pass. For the purposes of this essay I will assume that he believes the worst is likely to occur.

[2] This statement refers primarily to academic economists specializing in the Soviet area, and figures such as Gertrude Schroeder. Their views vary considerably. Some, like Harry Shaffer, basically accept official Soviet GNP statistics which show that the USSR is outperforming the USA by a considerable margin. See Harry Shaffer, 'The Conventional Wisdom vs. Soviet Economic Reality', *Osteuropa Wirtschaft*, 31 No. 2, (June 1986), pp. 132–42. Most follow the CIA's lead, but take a somewhat more optimistic attitude toward long-term prospects. Bergson's cautious appraisal of Soviet productivity growth potential captures the consensus: 'We can only speculate as to the sum of the diverse forces determining the future pace of Soviet TPP (technological progress proper). A distinct acceleration is not precluded, but more likely advance will continue at a slow pace, more or less comparable to that which has prevailed lately. A negative rate of TPP, although imaginable, is presumably not among the contingencies to be seriously reckoned with'. Abram Bergson, 'Technological Progress', in Bergson and Levine eds. *The Soviet Economy: Toward the Year 2000*, (George Allen and Unwin, London, 1983), p. 66. Also in the same volume see Bond and Levine, 'An Overview', p. 21 ('First, our baseline projection depicts a Soviet economy, in the last two decades of the twentieth century, that is growing at a lower rate than in previous decades, but still a rate that would be considered moderate by world standards'.); Weitzman, 'Industrial Production', p. 189 (' . . . the analysis is suggesting to us that Soviet industry will be growing in the 3% to 4% range over the next several years, certainly not more'.); Schroeder, 'Consumption', p. 332 ('Assuming continued progress in raising agricultural output, annual gains in per capita consumption of 1% to 2% at least should provide consumers with a sense of forward motion'.). Marshall Goldman, however, is less sanguine and sees the situation much like Birman. See Goldman, *USSR in Crisis: The Failure of An Economic System* (Norton, New York, 1983), pp. 180–1. Cf. Jan Winiecki, 'Are Soviet-type Economies Entering An Era of Long-Term Decline?' *Soviet Studies*, XXXVIII, No. 3 (July 1986), pp. 325–48, and 'Soviet-Type Economies: Considerations for the Future', *Soviet Studies*, XXXVIII, No. 4, (October 1986), pp. 543–561. Political scientists also tend to paint a relatively bleak picture, but draw back from predicting collapse. 'Yet while systemic crisis certainly describes a serious situation . . . the economy is not going bankrupt, and it is capable of delivering the necessary minimum of sustenance to the population. It can support the upkeep of its military machine. The crisis does not mean rebellious behavior on the part of the working class'. Seweryn Bialer, *The Soviet Paradox: External Expansion, Internal Decline* (Alfred Knopf, New York, 1986), p. 169. Other emigrés agree; Boris Rumer asserts 'the Soviet economy is clearly in severe straits, although it may be premature to declare it in a state of "crisis", if by that one means the imminence of structural collapse or conditions threatening the very survival of the system. Apocalyptic predictions must be viewed with a heavy dose of skepticism'. B. Rumer, 'Realities of Gorbachev's Economic Program', *Problems of Communism*, XXXV, No. 3 (May–June 1986), pp. 20–31. Cf. Timothy Colton, *The Dilemma of Reform in the Soviet Union* (Council on Foreign Relations, New York, 1986), pp. 32–67, and Michael Ellman, 'The Macro-Economic Situation in the USSR—Retrospect and Prospect', *Soviet Studies*, XXXVIII, No. 4 (October 1986), pp. 530–42.

[3] Birman, 'Soviet Economy', *Russia*, 12 (1986), pp. 63–4. It should be observed however that both Bergson and the CIA consider the Soviet Union to be seriously underproductive and underefficient. See Abram Bergson, 'Comparative Productivity: the USSR, Eastern Europe, and the West', *American Economic Review*, 77, No. 3 (June 1987), pp. 342–357, and CIA and DIA, *Gorbachev's Modernization Program: A Status Report*. DDB–1900–140–87, August 1987.

[4] 'In regard to investment, the CIA claim that, in 1976, Soviet investment was about 25% higher

than American is ridiculous . . . Let me add that the official Soviet figures, produced with the sole purpose of propaganda, show that Soviet investment is not larger than American. . . . Later we will talk about military expenditures, but I will tell you now that the CIA underestimates their share in the Soviet national product. . . . the CIA calculation ignores the exceptionally good conditions of military industries . . . conditions in military industries are at least 50% better than in others'. *Ibid.* pp. 65, 67. If Birman is correct the underproductivity and underefficiency of the Soviet economy is much more severe than Bergson and the CIA suggest, both with respect to the West and the other socialist economies alike. For an assessment of comparative aggregate and sectoral factor productivity in America and the Soviet Union see Steven Rosefielde, 'Comparative Systems Efficiency and Soviet Weapons Growth', paper presented at the 19th AAASS Conference, Boston, 6 November 1987, Table S1.

[5] The Fisher formula in the variant applied here is:

$$\theta = \left(\frac{\Sigma p_a q_a}{\Sigma p_s q_s} \cdot \frac{\Sigma r_a q_a}{\Sigma r_s q_s} \right)^{1/2}$$

where q_a and q_s are the American and Soviet product bundles, and p_a, r_a; p_s, r_s are their respective ruble and dollar prices. Values of θ are systematically lower than the arithmetic mean of the bracketed terms in the equation above. The greater the disparity between the ruble and dollar weighted indexes, the greater the dispersion from the arithmetic mean. The Fisher measure therefore implicitly adjusts the relative Soviet achievement downward to correct for the 'backwardness' of its product mix. The bias introduced in this way could be severe. The effects in the cases under consideration here, however, are relatively small, no more than a few percent.

[6] 'I cannot myself assuredly state the comparative size of the Soviet national product. But I do say that the economy is much smaller than is believed, and in any case, it is not second in the world; in particular it is less than that of Japan'. Birman, *Ibid.* p. 66. The Japanese GNP in 1985 was approximately 40% of that of the USA. He therefore apparently believes that the CIA's estimate of relative Soviet national income (55%) is at least 37·5% too high. See CIA and DIA, *Gorbachev's Modernization Program*, p. 2.

[7] Birman asserts that the CIA's comparative defence spending statistics overstate the Soviet advantage, but the degree of exaggeration is less than in non-defence activities. This interpretation is based on his assertion that defence is a substantially larger, and consumption a substantially smaller share of GNP than the agency claims. Birman, *Ibid.* pp. 65, 67.

[8] Birman's study is based on Gertrude Schroeder's and Imogene Edward's paper 'Consumption in the USSR: An International Comparison', JEC, (Washington 1981). It is published in *Ekonomika nedostach*, in the section entitled 'Potreblenie sovetskogo i amerikanskogo naseleniya', An English summary, 'Comparison of Soviet and American Consumption', is provided in *Russia*, 7–8 (1983), pp. 100–108. 'Moi vychisleniya dayut ves'ma otlichnyi ot TsRU rezul'tat-sovetskoe potreblenie vo vsekh variantakh otstaet ot amerikanskoyo ne v 3, a v 4–5 raz. Eshche i eshche raz razmyshlyaya nad vsem sobrannym mnoyu materialom, nad mnogimi chastnymi sopostavleniyami, starayas' predstavit' sebe kartiny v tselom, ya sklonyus' k tomy, chto dazhe variant IV-sovetskoe dushevoe potreblenie v 1976 g. sostavlyalo 22·4% ot amerikanskogo – vse eshche priukrashivaet deistvitel'noe sootnoshenie. No ostanovimsya na etom pokazatele i budem schitat' chto sovetskoe potreblenie otstaet v 4,5 raza'. Birman, *Ekonomika nedostach*, p. 377, 'In sum, on the basis of a very detailed examination of the study, I have concluded that Soviet per capita consumption was at best something like a fifth of American'. Birman, 'Soviet Economy', *Russia*, 12 (1986), p. 65. Cf. Abram Bergson, 'Soviet Consumption in Western Perspective', *Economic Notes*, 1972–1982 (Monte Dei Paschi Di Siena, Italy).

[9] 'KPSS stavit zadachii vsemirno-istoricheskogo znacheniya—obespechit' v Sovetskom Soyuze samyi vysokii zhiznennyi uroven' po sravneniyu s lyuboi stranoi kapitalizma . . . Razryv suzilsya v 60–kh godakh, no nachal rasshiyat'sya v 70–e gody. 'Birman, *Ekonomika nedostach*, p. 244.

[10] *Ibid.* pp. 216–380; and Birman, 'Soviet Economy', p. 64.

[11] Some of Birman's adjustments are impressionistic and may be influenced by American second economy incomes which are not reflected in official US statistics.

[12] Abram Bergson has computed two alternative estimates of relative Soviet and American per capita consumption (Fisher ideal measures) for the year 1955 valued at 1955 adjusted ruble factor cost and dollar prices. The first is for household consumption excluding communal services and the second for all consumption. These geometric means are respectively 19·5% and 24·1%. He also reports that relative consumption per capita rose from 31·0% valued in 1955 dollars to 39·1% valued in 1970 dollars. Assuming a proportionate increase in ruble values, the geometric mean of relative

per capita consumption in 1970 can be placed at roughly 29·7%. Abram Bergson, *Productivity and the Soviet System—The USSR and the West*, (Harvard University Press, Cambridge, Mass. 1978), pp. 49 and 67. An alternative CIA estimate of hidden inflation in the consumer sector is provided in CIA, *Soviet Gross National Product in Current Prices, 1960–80*, SOV83–10037, March 1983, p. 6. This rate 1975–80 is 1·7% per annum, and differs from the rate implied in Table A3. The source of the discrepancy between the two estimates is unclear.

[13] Bergson's comparative Soviet and American per capita consumption statistics are 5 percentage points lower than the CIA's in 1955 and 1970. If this is attributed to the CIA's overgrading, in line with Birman's analysis, then the estimates reported in Table A2 can be reduced further toward the lower end of Birman's spectrum. Other assumptions of course can be used to reconcile these estimates. The calculations performed here are intended for didactic purposes only.

[14] Birman clearly believes that per capita consumption will decline in the future. 'No i eto kraine maloveroyatno, ibo, tempy razvitiya SSR snizhayutsya i bez glubochaishikh radikal'neishikh strukturnykh preobrazovanii vsei sistemy vot-vot upadut do nulya . . . Protsess snizheniya zhiznennogo urovnya budet neizbezhno prodolzhat'sya, zakhvatyvaya vse bolee shirokie krugi naseleniya . . . Odnako bez ser'eznoishikh strukturnykh izmenii, to est' bez radikal'noi perestroiki vsei ekonomicheskoi sistemy, sovetskaya ekonomika voobshche ne budet dvigat'sya vpered. Obshchii rost proizvodstva na dushu naseleniya pochti uzhe prekratilsya, i vot vot ob"emy proizvodstvo nachnut padat', strana ustupit v period otritsatel'nogo rosta'. Birman, *Ekonomika nedostach*, pp. 199, 250, 384. According to the CIA per capita Soviet consumption grew 1% per annum 1980–85. Applying the average disparity between the CIA's and Birman's estimates 1960–80 shown in Table 3 implies a negative per capita consumption growth rate of −0·5% per annum. See *Allocation of Resources in the Soviet Union and China–1985*, Joint Economic Committee of Congress, 19 March 1986), p. 79.

[15] Birman, 'Soviet Economy', p. 67. 'So, if the CIA estimates the military share as 12–14%, I would assert that it is at least 20% of GNP'. Also see Birman, 'Who is Stronger, and Why?' *CIA Estimates of Soviet Defense Spending*, Hearing before the Subcommittee on Oversight of the Permanent Select Committee on Intelligence, House of Representatives, Ninety-Sixth Congress, Second Session, 3 September 1980, (Washington, D.C., 1980). The CIA's estimate of the defence burden has risen from 12–14% in 1970 to about 15–17% in 1982. See CIA and DIA, *Gorbachev's Modernization Program*, p. 8.

[16] 'Mne takzhe vozrazyat, chto esli ispravlenie velichiny sovetskogo potrebleniya dolzhno umen'shit' sravnitel'nuyu velichinu obshchestvennogo produkta, to uvelichenie otsenki doli voennykh zatrat budet imet' obratnyi effekt. Deistvitel'no, prinyav, chto oni sostavlyayut kak minimum 20% ot VNP, my tem samym uvelichivaem ego obshchii ob'em'. Birman, *Ekonomika nedostach*, p. 392.

[17] If defence spending in 1980 were 89·925 billion rubles, 19·425 billion more than reported by the agency in Table A4, the burden would be exactly 20%. Defence spending in 1970 at AFC was 43·5 billion. Soviet defence spending therefore may have grown $100((89{\cdot}925/43{\cdot}5)^{1/10} - 1)$, or 7·5% per annum. The CIA placed the figure of 4·9% per annum in *USSR: Measures of Economic Growth and Development*, but has subsequently reduced this estimate. Birman doubts the agency's latest figures. 'We can hardly believe that, starting in 1977, the USSR has frozen its expenditures for procurement', Birman, 'Soviet Economy', p. 67.

[18] CIA, *USSR: Measures of Economic Growth and Development, 1950–80*, JEC, 2 December 1982, pp. 16–17.

[19] See *Allocation of Resources in the Soviet Union and China–1985*, pp. 77–87. The CIA's latest figures must be used cautiously. They use a 1982 ruble price base which yields results that sometimes differ drastically from previously published growth statistics valued at 1970 ruble prices. Compare the present statistics with their counterparts in *Allocation of Resources in the Soviet Union and China–1983*, Joint Economic Committee of Congress, 20 September 1983, Table 10, p. 364. Per capita consumption 1975–80 for example grows 0·4 percentage points less rapidly in the new series. It should also be noted that while per capita consumption growth declines by 50%, from 2% per annum 1975–80 to 1% per annum 1980–85 in the new series, GNP growth falls negligibly from 2·3% to 2·2% per annum. See DIA and CIA, *The Soviet Economy Under a New Leader*, DDB–1900–122–86, July 1986, p. 18. Cf. CIA and DIA, *Gorbachev's Modernization Program*, Table B–3, p. 33.

[20] Henry Rowen (Chairman, National Intelligence Council), 'Testimony' in *Allocation of Resources in the Soviet Union and China–1982*, p. 179. 'In fact we do not consider an economic "collapse"—a sudden and sustained decline in GNP—even a remote possibility. Our projections indicate that growth in GNP will remain slow but positive'. Cf. *Allocation of Resources in the Soviet Union and China–1985*, p. 118.

[21] For a fuller discussion of the CIA's estimates see Steven Rosefielde, *False Science:*

Underestimating the Soviet Arms Buildup, Appendix 7, (second edition, 1987). Cf. Ellman, 'The Macro-Economic Situation in the USSR', 'I share the views of writers such as Birman about the situation since 1979. I disagree, however, with their futurological perspective', p. 533, and 'I suggest that the most reasonable base projection for the USSR for 1985–90 is an average increase in NMP produced according to TsSU in the range 1·5–4·5% p.a. and for an average GNP (actual, not CIA estimates) in the range −1 to +2% p.a.', p. 540.

[22] See note 14. Also Birman, 'State of Soviet Economic Affairs', p. 59, 'When I hear time and time again that the economy will "muddle through", I ask over and over by what magic will the general downward trend of the Soviet economy be reversed, or at a minimum arrested? As far as I understand the Soviet economy, its historical trends, and its current and future situation, this cannot happen'. Cf. Jan Winiecki, 'Are Soviet-type Economies entering an Era of Long-Term Decline?' p. 345, 'Since official growth rates are very low, we may conclude that stagnation of NMP and consequently, falling consumption have become the norm, rather than the exception'. Also Winiecki, 'Soviet-Type Economies: Considerations for the Future'.

[23] According to the CIA, Soviet GNP grew 2·2% per annum 1980–85, and only 1·5% and 1·6% per annum in 1984 and 1985 respectively. *Allocation of Resources–1985*, p. 77. US GNP grew 2·5% per annum over the same period. Aggregate growth in 1986 using 1982 ruble factor cost weights rose precipitously to 4·2% per annum. See CIA and DIA, *Gorbachev's Modernization Program*, Table B–4, p. 34. But cf. Plan Econ's alternative estimate of 1·4% per annum in '1987 Panel on the Soviet Economic Outlook. Perceptions on a Confusing Set of Statistics', *Soviet Economy*, 3, No. 1 (January–March 1987), Table 5 p. 8.

[24] Birman, *Ekonomika nedostach*, pp. 189–94. Cf. Boris Rumer, *Investment and Reindustrialization in the Soviet Economy*, (Westview Press, Boulder, Colorado, 1984). CIA and DIA, *Gorbachev's Modernization Program*, Table B–4, p. 34.

[25] Birman, *Ekonomika nedostach*, pp. 206–7. Birman, 'From the Achieved Level', *Soviet Studies*, XXX, No. 2 (April 1978), pp. 153–72. Cf. Padma Desai, *The Soviet Economy: Problems and Prospects* (Basil Blackwell, Oxford, 1987), pp. 7–60; Colton, *Dilemma of Reform*, pp. 140–45; and James Noren, 'Investment Strategy Under Gorbachev', paper presented at the 18th National Convention of the American Association for the Advancement of Slavic Studies, New Orleans, 20–23 November 1986.

[26] Birman, *Ekonomika nedostach*, p. 207. Cf. Birman, 'Soviet Economy', p. 69, and Birman, 'State of Soviet Economic Affairs', pp. 62–3; Cf. Desai, *Soviet Economy*, pp. 41–48, and Colton *Dilemma of Reform*, pp. 152–74, and Roger Clarke, 'The Study of Soviet–Type Economies: Some Trends and Conclusions', *Soviet Studies*, XXXV, No. 4 (October 1983), pp. 525–32.

[27] Birman, *Ekonomika nedostach*, pp. 206; Birman, 'State of Soviet Economic Affairs', p. 63; Cf. Desai, *Soviet Economy*, p. 39; *Allocation of Resources in the Soviet Union and China–1985*, p. 118, Steven Rosefielde, 'Economic Foundations of Soviet National Security Strategy', *Orbis*, 30, No. 2 (Summer 1986), pp. 317–30.

[28] 'Years ago, I suggested as one of the basic ingredients that an economy of the Soviet type is governed by shortage . . . [by the] inevitability of demand exceeding supply under socialism'. Birman, 'Soviet Economy', p. 63. 'Among the reasons for a slowdown is the growing general imbalance of the economy: demand is much larger than supply . . . a capitalist economy is not balanced either, but its imbalance is in the opposite direction. The supply is larger than the demand. Therefore, I call a capitalist economy, an economy of plenty (or abundance), and the Soviet one an economy of shortages'. Birman, 'State of Soviet Economic Affairs', p. 59. Cf. *Ekonomika nedostach*, pp. 133–63, and Igor Birman and Roger Clarke, 'Inflation and the Money Supply in the Soviet Economy', *Soviet Studies*, XXXVII, No. 4, (October 1985), pp. 494–504. Also see Janos Kornai, *Economics of Shortage, Volumes A and B*, (North Holland, Amsterdam, 1980); Janos Kornai and Bela Martos eds. *Non-Price Control* (North Holland, Amsterdam, 1981); Janos Kornai, *Growth, Shortage and Efficiency* (University of California Press, 1982). Janos Kornai 'The Hungarian Reform Process', *Journal of Economic Literature*, XXIV, No. 4, (December 1986), pp. 1687–1737. Cf. Desai, *Soviet Economy*, pp. 25–31, and David Howard, *The Disequilibrium Model in a Controlled Economy*, (Lexington Books, Lexington, Massachusetts, 1979), and Evsey Domar, 'The Blind Men and the Elephant: An Essay on Isms', paper presented at the 19th AAASS Convention, Boston, 7 November 1987.

[29] See note 1. Birman himself does not use the term cumulative disequilibrium, although it is clearly implied in his discussion of cumulative forced savings. See Birman and Clarke, 'Inflation and the Money Supply'. I have coined it to convey the idea that the effects of persistent disequilibrium not only diminish current economic performance, but increasingly degrade future prospects as well.

[30] Birman, *Secret Incomes of the Soviet State Budget*, pp. 141–62; 'Financial Crisis in the USSR', *Soviet Studies*, XXXII, No. 1, (January 1980); 'Will Andropov Purge the Passbooks?', *The Wall*

Street Journal, 21 March 1983. Cf. Steven Rosefielde, 'Review of Igor Birman's, *Secret Incomes of the Soviet State Budget*, *Journal of Economic Literature*, XXI, (September 1983), pp. 1018–19.

[31] For a fuller discussion of this issue see Steven Rosefielde and R. W. Pfouts, 'Economic Optimization and the Technical Efficiency in Soviet Enterprises Jointly Regulated by Plans and Incentives', *European Economic Review*, 32, (April 1988). Cf. Desai, *Soviet Economy*, pp. 17–20.

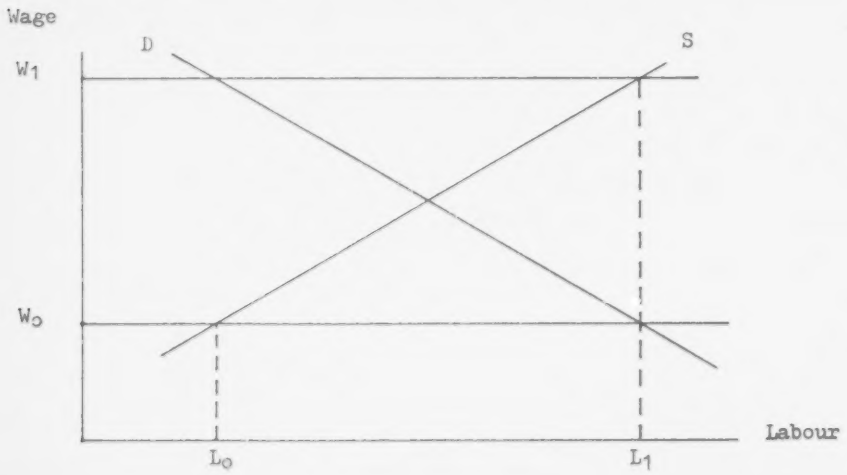
[32] David Granick, *Job Rights in the Soviet Union: Their Consequences*, Cambridge University Press, 1987. Cf. Mikhail Gorbachev, *On the Tasks of the Party in the Radical Restructuring of Economic Management*, (Novosti, Moscow, 1987).

[33] Economic capacity is defined by reference to the Paretian standard as the profit maximizing production bound, given rationing biased flexible prices. It is lower than the generally competitive level because factors are administratively misallocated, but these losses are partly offset by overemploying inputs rationed to the firm.

[34] '. . . the economy of shortage does not have reserves'. Birman 'Soviet Economy', p. 70. Cf. Birman, 'From the Achieved Level', p. 166, Birman, 'State of Soviet Economic Affairs', p. 60, and Birman and Clarke, 'Inflation and the Money Supply', p. 495. Birman believes of course that the actual capabilities of Soviet firms are necessarily severely constrained below their theoretical potential. Bialer argues just the reverse: 'the economic system and political-economic relations existing in the Soviet Union contain so much slack, are ridden by so much irrationality, and therefore contain so much unused potential that could be mobilized by a strong political leadership, that even without a radical change, economic performance could be improved'. Bialer, *The Soviet Paradox* . . . p. 144.

[35] Labour is often said to be in short supply in the Soviet Union on the erroneous premise that the state wants to hire more labour at a competitive wage than the workers are prepared voluntarily to supply. The state however does not offer a competitive wage, and uses legislative means to compel workers to oversupply their services. The state's excess demand is purely hypothetical and cannot be used to describe supply conditions in the labour market. Labour is not in shortage in market economies because firms would undoubtedly demand more at below market wages. See Thomas Kniesner and Arthur Goldsmith, 'A Survey of Alternative Models of the Aggregate U.S. Labour Market', *Journal of Economic Literature*, XXV, No. 3 (September 1987), pp. 1241–80.

[36] The principle at issue can be illuminated diagrammatically as follows:



The voluntary supply of labour at the prevailing wage rate W_0 in Figure 1 is L_0. Anti-parasite laws however compel employment to the right of L_0, in the limit at L_1 where the manager's demand curve derived from official prices intersects the effective wage rate. Labour consequently is involuntarily overfully employed, and will seek either to have its wages augmented to W_1, or reduce its effort to the equivalent of L_0.

[37] Bialer concurs with Birman. 'Most revealing, original and never seen in the Soviet Union in published form, was the author's (Tatyana Zaslavskaya's) stress on the catastrophic degeneration of the work ethic among the work force as a key obstacle to reforms that could improve the economic situation'. Bialer, *The Soviet Paradox*, p. 134. Cf. 'The Novosibirsk Report', *Survey*, 28, No. 1

(Spring 1984), pp. 88–108; T. Zaslavskaya, 'Ekonomicheskoe povedenie i ekonomicheskoe razvitie', *Ekonomika i organizatsiya promyshlennogo proizvodsta*, 1980, no. 3.

[38] Birman, *Ekonomika nedostach*, p. 198.

[39] Kornai, 'Growth, Shortage and Efficiency', pp. 75–88, and Figure C1, p. 141. Birman might agree that the Soviet economy 'appears' to be in a state of controlled disequilibrium, but would counterargue that cumulating forced savings are likely to cause an abrupt drop in effort in the wake of a financial debacle. I disagree with his proposition because I see no evidence suggesting an imminent run on the ruble, and believe the government has the means to avert a crisis when warning signs emerge. He might also dispute my position by arguing that investment decisions were becoming progressively more irrational, or that bureaucratic disruptions were continuously intensifying. These possibilities may require closer scrutiny if per capita Soviet consumption growth deteriorates further, but as Bergson puts it, 'a negative rate of TPP (technological progress proper) . . . is presumably not among the contingencies to be seriously reckoned with'. Bergson 'Technological Progress', p. 66.

[40] Desai, *Soviet Economy*, pp. 49–50, and Morris Bornstein, *East–West Technology Transfer: The Transfer of Western Technology to the USSR*, (OECD, Paris, 1985).

[41] *Ibid.* pp. 36–38.

[42] Birman frequently argues that reforms will not revitalize the Soviet economy. Many specialists agree with him. The point at issue here however is not revitalization, but the less ambitious goal of maintaining a slowly rising standard of living. Policies that merely preserve the *status quo* may suffice.

[43] Soviet per capita consumption growth is estimated by adjusting the official rate downward by 0·6 percentage points per annum, for the disparity exhibited between the official and the CIA rates 1960–80 shown in Table A3. The US per capita consumption growth rate is obtained from *Economic Indicators*, Council of Economic Advisers, November 1985, pp. 4 and 6.

[44] *Narkhoz 1985*, p. 411. The official Soviet index of per capita consumption growth (rost real'nykh dokhodov naseleniya) rose 2·1% per annum 1980–85. Cf. CIA, *USSR: Measures of Economic Growth and Development 1950–80*, Table 10, p. 335. Also see Rosefielde, *False Science*, Second Edition, Appendix 7.

[45] See note 14.

[46] Desai, *Soviet Economy*, p. 39. 'It is not likely that Mr. Gorbachev can persuade his military establishment to reduce this share downward, by further reducing the annual growth rate of defense spending below the low and declining growth rate of GNP, unless the arms control negotiations are successful'.

[47] Steven Rosefielde, 'Economic Foundations of Soviet National Security Strategy', *Orbis*, (Summer 1986), pp. 317–30. Cf. Bialer, *The Soviet Paradox*, pp. 144 and 150. The emphasis here on defence expenditures is only intended to be illustrative and does not exclude other adaptive alternatives.

[48] The first finding of the Soviet Interview Project ' . . . suggests that citizens of the Soviet Union are, by and large, satisfied with many aspects of their lives'. See James Millar and Peter Donhowe, 'Life, Work, and Politics in Soviet Cities', 'Problems of Communism', January–February 1987, p. 46. A companion book, *Politics, Work and Daily Life in the USSR*, (Cambridge University Press, 1987) is forthcoming. Cf. Janet Chapman, 'Activate the Human Factor: Gorbachev's Policies Toward Workers and Consumers', Economics Department Working Paper No. 208, University of Pittsburgh, February 1987, and Walter Connor, 'Social Policy Under Gorbachev', *Problems of Communism*, XXXV, (July–August, 1986), pp. 31–46.

[49] The first interval, following Birman, assumes that per capita Soviet GNP was between 20% and 25% of the US level, computed as the geometric dollar and ruble mean. The second interval is bounded from below by the CIA's estimate and from above by the official Soviet figure (rost real'nykh dokhodov naseleniya).

[50] James Steiner, *Inflation in Soviet Industry and Machine-Building and Metalworking (MBMW)*, SRM78–10142, July 1978; CIA, *Soviet Gross National Product in Current Prices, 1960–80*, pp. 5–6. Cf. Steven Rosefielde, 'Are Soviet Industrial Production Statistics Significantly Distorted by Hidden Inflation?' *Journal of Comparative Economics*, 5, No. 2 (June 1981), pp. 185–99; Rosefielde, 'A Comment on David Howard's Estimate of Hidden Inflation in the Soviet Retail Sales Sector', *Soviet Studies*, XXXII, No. 3 (July 1980), pp. 423–7; Rosefielde, 'Hidden Inflation in the Soviet Union: A Rejoinder to David Howard', *Soviet Studies*, XXXIII, No. 3, (October 1981), pp. 610–15; Rosefielde, 'Disguised Inflation in Soviet Industry', *Journal of Comparative Economics*, 7, (March 1983), pp. 71–76; Rosefielde, *False Science*, Second edition, appendices 7 and 8; and Abram Bergson, 'On Soviet Real Investment Growth', *Soviet Studies*, XXXIX, No. 3, (July 1987), pp. 406–24. Cf. Gavin Peebles, 'Aggregate Retail Price Changes in Socialist Economies: Identification,

Theory and Evidence for China and the Soviet Union', *Soviet Studies*, XXXVIII, No. 4, (October 1986), pp. 477–507.

[51] '. . . I humbly question the decision to base all studies of the Soviet economy on modern Western theories . . . to my best knowledge, no attempt has been made to create a special theory of Soviet-type economies'. Birman, *Soviet Economy*, p. 62. The synthesis Birman calls for probably will require a rigorous model elaborating how institutional factors affect economic potential in different historical environments.

[52] Mikhail Gorbachev, *On the Tasks . . .*, p. 6. For a scathing condemnation of Soviet statistics which should not be accepted uncritically, see Vasilii Selyunin and Grigorii Khanin, *Novyi mir*, 1987, No. 2, pp. 181–201.

[53] CIA and DIA, *Gorbachev's Modernization Program*, Tables B–4 and B–5, pp. 34–35.

[54] This assumes in accordance with the CIA's Cobb-Douglas specification that capital deepening and technological change are functionally independent.

[55] See Steven Rosefielde and R. W. Pfouts, 'The Demise of the Command Economy? Gorbachev's Proposals for Radical Industrial Reform', and Steven Rosefielde, 'Comparative Systems Efficiency and Soviet Weapons Growth', both presented at the 19th AAASS Conference, Boston, 6–7 November 1987.

[56] Gorbachev's radical industrial reforms, should they succeed, could render the debate over prospects for a Soviet economic crisis moot. The CIA however expects them to fail. See Gertrude Schroeder, 'Testimony to the JEC', 4 September 1987, forthcoming. This article is scheduled to be reprinted in *Soviet Economy*. For Birman's views on technological retrogression see note 1, this paper. Bergson takes the opposite position. See note 2.

[57] The decline however is not uniform across sectors. GNP growth for the quinquennia 1975–80 and 1980–85 is virtually unchanged. This disparity could have a variety of explanations. For a discussion of alleged increases in Soviet statistical misrepresentation and their effects on estimated per capita consumption growth see '1987 Panel on the Soviet Economic Outlook: Perceptions of a Confusing Set of Statistics', *Soviet Economy*, 3., No. 1, (January–March 1987), pp. 3–39. See DIA and CIA, *The Soviet Economy Under a New Leader*, p. 18. Also in assessing whether the decline in Soviet economic performance is an inexorable consequence of the system, it should be noted that the growth rates of all Western industrialised nations decelerated significantly after the first 'oil shock', 1973–84. See Angus Maddison, 'Growth and Slowdown in Advanced Capitalist Economies', *Journal of Economic Literature*, XXV, No. 2, (June 1987), pp. 649–98.

Senator BIDEN. Thank you very much.

Although it was a statement that I know was thorough, it was not as thorough as you would like it to be.

I really apologize. It is now 2 minutes before 2 o'clock.

I most apologize to our clerk, our stenographer, here, who has been taking down everything.

We have been going straight for 4 hours, and I am building a very bad reputation among the stenographers because every time they see me, they know we just keep going straight. I doubt whether I will get many more to sit with me, whether it is in the Judiciary Committee or here.

But I do ask unanimous consent—and since I am the only one here, it will be very easy to get it—that a statement by my colleague, the ranking member of the committee, Senator Helms, be submitted for the record.

[The prepared statement of Senator Helms follows:]

PREPARED STATEMENT OF SENATOR HELMS

Mr. Chairman, the Kremlin's military policy proceeds from the capabilities of the Soviet military-industrial complex. The capabilities of the Soviet military-industrial complex, in turn, are dependent upon the ability of the Soviet regime to obtain finance, goods, services, and technology from the free world. As Lenin cynically noted, the West would sell the rope which the Communists would use to hang the West.

We must ask ourselves several questions: Has Gorbachev forged an alliance with leading financial and industrial circles in the West?

How does such an alliance affect Soviet defense policy and military construction?

Will arms control become more difficult to achieve as a result of Western trade with the Soviets?

Are Western financial interests lobbying their respective governments—primarily the German Government, the British Government, the French Government, the Italian Government, the Japanese Government, and our own Government—for a new political and economic collaboration?

Gorbachev appear to be holding out a carrot to Western businessmen; but if we look at his continued drive for modernization of conventional and strategic forces, he is plainly keeping a stick ready to intimidate Western governments.

Of course, it is the taxpayer who will ultimately foot the new bill for West-East trade and help to build the Soviet war machine. Many of the credits that are being extended to the Soviet Union are guaranteed by governments and therefore by taxpayers. Financing arrangements to the Communist world which use the IMF or the World Bank or other multilateral institutions are simply using taxpayers' funds. When Gorbachev says "glasnost" means "openness," he is referring to the taxpayers' pockets.

There is an irony here. Western industrial and financial interests are falling all over themselves to do business with the Communist world. But these same companies are defense contractors in their own countries. So, we have the spectacle of multinational corporations—and their bankers—getting a significant piece of the United States defense budget at the very same time that through increased commercial relations with the Soviet economy, they are building up the military-industrial capabilities of the Soviet Union.

Mr. Chairman, what do we appear to have here? Is the same set of multinational corporations and their bankers profiting both by defense contracts and by building up the aggressive military machine of our chief antagonist?

I am confident that we could reduce our own defense burden by means of a sensible international economic policy aimed at reducing the military-industrial capabilities of the Soviet Union.

We need today, as at no time in the past, the creation of a sound national strategy which includes the economic element of power as well as the political, diplomatic, military, and psychological elements of power. International economic policy in the few remaining years of this century can play a significant role in advancing the strategic long-range interests of this Nation. I am pleased that such a fine group of experts has been assembled here today and I look forward to their testimony.

Senator BIDEN. I also have a number of questions from Senator Helms for both of you gentlemen, and also several questions from me. If you would be willing to answer those for the record, we would appreciate it.

I will also have questions for the other witnesses later. I am not going to dig for them right now, but they are questions that I mentioned earlier.

Gentlemen, your testimony has been enlightening, particularly your discussion about what the Soviets are doing that they saying they are not doing, or that they are implying they are not doing.

I appreciate your time. It was good to have you back, Doctor, after so many years.

I wanted to ask you a little bit about Soviet intentions and Soviet attitudes toward what they believe our intentions to be, but I will have to do that in writing.

I thank you very much, and, to the great relief of our stenographer, this hearing is adjourned.

Thank you.

[Whereupon, at 2 p.m., the committee adjourned, to reconvene at 2:04 p.m., May 18, 1989.]

HEARING #6
DEFENSE AND ARMS CONTROL POLICY

THURSDAY, MAY 18, 1989

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met at 2:04 p.m., in room SD–419, Dirksen Senate Office Building, Hon. Joseph Biden presiding.

Present: Senators Biden, Kassebaum, Sarbanes, and Robb.

Senator BIDEN. The hearing will please come to order.

Welcome, gentlemen. I think you are going to be Nitze, if you sit there, and you are going to be Kampelman. We will just switch the nameplates, though. [Laughter.]

Mr. NITZE. It would be my privilege, as a matter of fact.

Senator BIDEN. Well, it is a privilege to have both of you here.

I have an opening statement that, if you will bear with me, will take a few minutes, and then I would invite you each to make whatever statement you would like, and then maybe we will get the chance to proceed to a little bit of a discussion.

Today the committee will hold its sixth hearing on United States-Soviet relations, focusing on defense and arms control.

This area is one where I believe the administration has a great opportunity, but where I personally believe it is not, at this point at least, showing the creativity and leadership that the present situation demands and offers.

While the administration is correct that United States foreign policy should not be driven by public relations, and public relations considerations, I believe we cannot simply ask for more and more from the Soviets while we refuse to show our hand, or to spell out our vision on how to reduce the costs and risks of East-West military competition.

And it seems to me this means laying out a comprehensive, coherent program for prudent but far-reaching arms control reductions that challenge the ultimate assertion of the Soviet Union that they are moving into a fundamentally different situation and a fundamentally different posture—which remains to be seen.

I submit that one posture that we cannot take, if we intend to accept the mantle of leadership, is one which expresses a fear of negotiations.

The purpose of these hearings is to examine what elements a comprehensive, coherent arms reduction program should entail, and what should our objective be in the negotiations in strategic arms—the so-called START talks that reopen in June?

How far should we seek to go in the Vienna conventional arms talks, the CFE talks? Should we be prepared to negotiate on short-range nuclear forces, which are referred to in the press and by us as SNF, and if so, what outcome should we seek?

And finally, what should the relationship be between and among these various negotiations?

In my view, there is a natural and indeed an inextricable link between pursuing reductions in strategic arms while maintaining a prohibition on the building of strategic defenses contained in the 1972 ABM Treaty.

Resolving this problem is rather straightforward. It requires little more than rejecting the so-called reinterpretation, which I believe is both unconstitutional and perverse, as I know our two witnesses understand and now might believe to be.

I am optimistic in this regard for many reasons, one of which is the statement last year by Brent Scowcroft, who now has a very significant role in this administration, who said, and I quote, "It is unbefitting the United States to try to maneuver about a broad interpretation."

Similarly, I believe that there is an inherent link dating back to the 1950's between the conventional balance in Europe and the requirement for short-range nuclear forces. Therefore in my view, we should be prepared in the near future to begin SNF negotiations, but actual implementation of any negotiation can and should be synchronized with the phase I agreement that would cut NATO and Warsaw Pact conventional forces down to equal levels, if and when that agreement were arrived at.

On the other hand, the suggestions made by former President Nixon and Dr. Henry Kissinger, former Secretary of State, that a formal link should be established between strategic arms reductions and the establishment of a conventional balance I find greatly troubling, if not pernicious.

There is no logical connection, in my view, between the two, and the net effect of such linkage would be to complicate efforts to achieve a START treaty.

Today, we will begin with former ambassador Paul Nitze, and Max Kampelman, both of whom served President Reagan so ably in negotiating the INF Treaty and making so much progress toward the START Treaty.

Ambassador Nitze, you not only have served President Reagan, you served this country for a long time with a distinguished record that is exceeded by no one, and I wish to commend you on your willingness to speak out on the issue of SNF, and demonstrate what I believe in my characterization to be the faulty thinking now driving our policy.

I know it must be difficult, and I am pleased to say that maybe I should not say—I was going to say that our views are harmonious, but that may hurt your reputation, so I will refrain from saying that. But nonetheless, I compliment you.

Just as you did in the "walk in the woods," as it has become known, you are putting forward a sensible approach to this problem that would satisfy, in my view, European concerns, and yet ensure the necessity of coupling between U.S. security and that of our NATO allies.

Indeed, if the Reagan administration had followed your advice, in my view, in the walk in the woods, by allowing a small number of INF missiles on both sides, we would have avoided the problems arising from the sense of singularization that is now so pervasive in Germany.

So, I would hope to explore with you how to ensure coupling between Europe and the United States, while pursuing reductions in short-range nuclear force missiles.

We may disagree about the fine points, such as the ultimate objective of such talks, and whether they should be somehow linked to conventional arms. This is where reasonable people can disagree.

What I find unreasonable is the posture of no negotiations, no way.

Ambassador Kampelman, I am sure you are aware of the many criticisms that have been leveled against the nearly complete START framework that you did so much to bring about. Some very influential people have said that START does not go far enough in reducing Soviet missiles, that it will make United States forces less survivable, and that it should be postponed until we have achieved parity in conventional arms.

I would hope you could address these criticisms, because they raise serious questions which demand serious responses.

Assuming, as we all do, that the Bush administration will move away from the Reagan administration's proposal to ban mobile ICBM's—my own reading is that the existing START framework is sound.

It will involve much greater reductions in ballistic missile forces by the Soviet Union, while still allowing the United States maximum flexibility to deploy a survivable mix of ICBM's, SLBM's, and bombers.

Ambassador Nitze and Ambassador Kampelman, I look forward to your discussions, and we will continue our discussions in these matters with a second panel of witnesses.

But I cannot overemphasize how flattered the committee is that you are here, and what a significant role you not only have played, but continue to play on these matters in your private lives, now, because you are both listened to by a great number of people on both sides of the aisle, so what you have to say has great impact.

I welcome you both. Thank you for being here, and Ambassador Nitze, we will start with you, if that is appropriate.

STATEMENT OF HON. PAUL N. NITZE, FORMER AMBASSADOR AT LARGE AND SPECIAL ADVISOR ON ARMS CONTROL MATTERS

Mr. NITZE. Mr. Chairman, it is a pleasure to be before this committee again.

Rather than prepare a separate statement, it seemed to me best to utilize an article by me which appeared last Sunday in the Outlook section of the Washington Post, which covers my views on the subject matter in which I understand your committee is interested.

There is no change in my views today from those which were published last Sunday.

In my remarks today, I can either summarize some of the material put into the record, or read it in its entirety, whichever you would wish, Mr. Secretary.

Senator BIDEN. We have plenty of time, and I would like as thorough a set of comments by you as possible, so please do not——

Mr. NITZE. Then why do not I read the full statement?

Senator BIDEN. Please do.

Mr. NITZE. From the early days of NATO, 40 years ago, it has often been charged that NATO was an alliance in disarray, and often the charge appeared to be well founded, particularly when Gen. Charles de Gaulle withdrew France from the NATO military organization, though not from the North Atlantic Treaty.

But these differences, though serious, could in time be worked out and did not result in the shattering of the Alliance.

Today's controversy with the German Government concerning negotiations with the Soviets on short-range nuclear missiles could be more serious. The continental European countries are backing Germany against the Anglo-Saxons, or rather, the noncontinental European countries, President Bush and Secretary of State James Baker, prodded by an adamant British Prime Minister Margaret Thatcher.

There has long been a tension in United States policy toward Europe between the special relationship between England and America developed by Mr. Churchill and Mr. Roosevelt during World War II and the fact that the sector crucial to the defense of NATO is the central front on the continent of Europe.

Partially as a result of the latter fact, Germany and France have been at the heart of our European policy during the postwar years.

When England and the United States joined in hectoring demands for action by the continental NATO countries, this is taken as unwarranted pressure by what some of the Germans call the Anglo-Saxons, who are not viewed by the continentals as being true Europeans.

Furthermore, the uncompromising position of the Anglo-Saxons against any negotiations with the Soviets about short-range missiles, while concurrently demanding that West Germany, sometime in the future, agree to modernization of our Lance missiles in Germany, is politically unacceptable to the German Government—in fact, any conceivable present German Government.

The Germans are being backed by the other NATO continental European powers. Unless a compromise can be found, those relationships can split the alliance with serious consequences to NATO unity that Gorbachev has long hoped would drop into his lap.

What should be done about all this? At the beginning of this administration, I outlined to Secretary of State Baker an approach that I thought could give us the initiative in working out a solution. My suggestion was that we talk to the German Government, specifically to Chancellor Helmut Kohl, and propose the following course of action.

Rather than refuse to negotiate with the Soviets on the subject of zero to 300-mile nuclear missiles deployed in Germany, I suggested we tell Kohl we would be prepared to ask the Soviets to participate in such negotiations under certain conditions. The first condition would be that Kohl and his government agree to stick to their long-

standing position that they are firmly opposed to the total elimination of short-range nuclear ballistic missiles.

Second, that his government back us in seeking equal ceilings with the Soviets on such missiles, at a level substantially above zero, preferably in the 200- to 300-missile range.

And third, that NATO as a whole support this initiative.

I emphasize that the current United States position of insisting on German agreement to modernize Lance, while adamantly refusing to consider negotiations with the Soviets on the subject, could not today be agreed by any conceivable German Government.

It has been argued, principally by Henry Kissinger, that to enter into a negotiation with the Soviets will inevitably result in agreeing to their demand, their possible demand, for the total elimination of short-range missiles in Germany.

To enter into a negotiation does not mean that we have to concur in the other side's demands. We have had 20 years of experience in demonstrating the reverse.

It is true that a segment of German political opinion favors the unilateral dismantling of the short-range missiles on German soil, and will continue to do so, even if we enter into negotiations with the Soviets on the subject.

But it is also true that a majority of Germans favor maintaining the alliance and remaining useful partners with the rest of NATO, including the United States. It should be the objective of U.S. policy to assist that majority, through our conduct, to prevail over the more politically active opposed groups.

There is another dimension to this issue, the military dimension. The Soviets have a large number of short-range missile launchers. It is estimated that the number of their launchers capable of launching this type of missile is approximately 1,400.

By contrast, the United States is generally estimated to have about 88 such launchers.

The Soviet launchers can launch a variety of missiles, some armed with high explosives, some with chemical weapons, some with nuclear weapons. One estimate is that the Soviets can deploy some 3,000 such nuclear armed missiles at a significantly longer range than our present Lance missiles.

In the absence of any agreed limitation, the Soviets are in a position to increase their inventory, to any level they may consider necessary.

Is it really wise to allow the Soviets to retain an immense ratio of advantage in this category of weaponry?

Mr. Gorbachev's offer last week to Secretary of State Baker, to unilaterally reduce the number of Soviet short-range missiles by 284, will somewhat reduce the existing imbalance. But it does not negate the desirability of a negotiated, equal solution to this problem.

It is argued that a U.S. ability to initiate an exchange of nuclear weapons, no matter how militarily ineffective, will add a necessary run to the ladder of graduated nuclear deterrence.

But is it not possible to use other nuclear weapons of any range desired, if all that is required is to be able to initiate a nuclear exchange? We have an inventory of such weapons of every conceivable range.

The principal deterrent to war with the Soviet Union, including both conventional and nuclear war, must in the end rest on our diverse and survivable panoply of strategic forces.

Would not we and NATO be more secure with a low, but equal, ceiling on the short-range missiles of both sides? The Soviets may not agree to this, but why refuse negotiations aimed at such an outcome?

A further question has been raised by Senator Sam Nunn, Representative Aspen, and others, concerning the timing of stabilizing conventional force reductions relative to negotiations on the limitation of short-range nuclear missiles.

They are correct in arguing that the principal reason NATO needs short-range nuclear weapons is the great superiority of Warsaw Pact conventional forces over NATO conventional forces.

The argument over whether to negotiate reduced equal ceilings on short-range nuclear forces would disappear, I believe, if the Warsaw Pact and NATO conventional forces were reduced to equal levels.

But if we were able to achieve agreement on equal levels of short-range nuclear weapons in Europe at about the level I have suggested we aim at, I see no reason why we should deny ourselves the benefit of the one-sided Soviet reductions implied by such an outcome, until we have achieved a more ambitious, and, I believe, time-consuming goal of stabilizing conventional force reductions.

Achieving a stabilizing reduction in conventional forces is an important—I believe the most important of NATO goals.

We have spent years negotiating a mandate for such talks in the framework of the Helsinki process. Negotiations between NATO countries and the Warsaw Pact countries are about to begin. These negotiations are properly multilateral, not bilateral between Washington and Moscow.

On the NATO side, most of the conventional forces are non-U.S. forces. It would be improper for us to take over the negotiations from our NATO allies. They would resent any such American action.

Multilateral negotiations have historically taken much time. The Soviets, some months ago, announced a target of significant unilateral conventional force reductions, but those reductions, if carried out, would still have left the Soviet Union with a dangerous superiority and tanks, self-propelled artillery, and other important items.

In Moscow last week during Secretary Baker's visit, Mr. Gorbachev announced a proposal for much deeper, multilateral reductions in Europe. Whether this opens a prospect for a prompt resolution of these difficult problems will require intense study by NATO.

Behind the short-range missile issue is the question of whether the Soviet Union has really changed its spots. Should we try to encourage what appears to be constructive change in the Soviet Union, or should we be cautious until we know more?

Will Gorbachev survive as the unquestioned arbiter of political decisions in the Soviet Communist Party, and thus in the Soviet Union? If so, what will his objectives be, and if not, what direction will the Soviet Union take?

I doubt that this set of questions presents us with a real issue. We can both be cautious, not letting down our guard, and at the same time explore with the Soviets whether they are prepared to negotiate agreements, which on balance would be helpful to us and acceptable to Gorbachev.

Caution and the exploration of the possible are not necessarily contradictory aims.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Nitze follows:]

PREPARED STATEMENT OF PAUL H. NITZE

It is a pleasure to appear again before this Committee. Rather than prepare a separate statement, it seemed to me best to utilize an article by me which appeared last Sunday in the Outlook Section of The Washington Post, which covers my views on the subject matter in which I understand your Committee is interested. There is no change in my views today from those which were published last Sunday. In my remarks I will summarize some of the material, but for the record I submit it in its entirety.

From the early days of NATO forty years ago, it has often been charged that NATO was an alliance in disarray. And often the charge appeared to be well-founded, particularly when Gen. Charles de Gaulle withdrew France from the NATO military organization (though not from the North Atlantic Treaty). But these differences, though serious, could in time be worked out and did not result in a shattering of the alliance.

Today's controversy with the German government concerning negotiations with the Soviets on "short-range nuclear missiles" could be much more serious. The continental European countries are backing Germany against the Anglo-Saxons -- President Bush and Secretary of State James A. Baker III, prodded by an adamant British Prime Minister Margaret Thatcher.

There has long been a tension in U.S. policy toward Europe between the special relationship between England and America developed by Churchill and Roosevelt during World War II and the fact that the sector crucial to the defense of NATO is the central front on the continent of Europe. Partially as a result of the latter fact, Germany and France have been at the heart of our European policy during the post-war years.

When England and the United States join in hectoring demands for action by the continental NATO countries, this is taken as unwarranted pressure by the Anglo-Saxons, who are not viewed by the continentals as being true Europeans. Furthermore, the uncompromising position of the Anglo-Saxons against any negotiations with the Soviets about short-range missiles -- while concurrently demanding that West Germany some time in the future agree to modernization of our Lance missiles in Germany -- is politically unacceptable to the German government. The Germans are being backed by the other NATO continental European powers. Unless a compromise can be found, those relationships can split the alliance with the serious consequences to NATO unity Gorbachev has long hoped would drop into his lap.

What should be done about all this? At the beginning of this administration, I outlined to Secretary of State Baker an approach that I thought could give us the initiative in working out a solution. My suggestion was that we talk to the German government, specifically to Chancellor Helmut Kohl, and propose the following course of action:

Rather than refuse to negotiate with the Soviets on the subject of the zero-to-300-mile nuclear missiles deployed in Germany, I suggested we tell Kohl we would be prepared to ask the Soviets to participate in such negotiations under certain conditions. The first condition would be that Kohl and his government agree to stick to their long-standing position that they are firmly opposed to the total elimination of short-range nuclear ballistic missiles; second, that his government back us in seeking equal ceilings with the Soviets on such missiles at a level substantially above zero (preferably in the 200- to 300-

missile range); and thirdly, that NATO as a whole support this initiative.

I emphasized that the current U.S. position of insisting on German agreement to modernize Lance while adamantly refusing to consider negotiations with the Soviets on the subject could not today be agreed to by any conceivable German government.

It has been argued, principally by Henry Kissinger, that to enter into a negotiation with the Soviets will inevitably result in agreeing to their possible demand for the total elimination of short-range missiles in Germany. To enter into a negotiation does not mean that we have to concur in the other side's demands. We have had twenty years of experience in demonstrating the reverse. It is true that a segment of German political opinion favors the unilateral dismantling of the short-range missiles on German soil and will continue to do so even if we enter into negotiations with the Soviets on the subject. But it is also true that a majority of Germans favor maintaining the alliance and remaining useful partners with the rest of NATO including the United States. It should be the objective of U.S. policy to assist that majority, through our conduct, to prevail over the more politically active opposed groups.

There is another dimension to this issue -- the military dimension. The Soviets have a large number of short-range missile launchers; it is estimated that the number of their launchers capable of launching this type of missile is 1,400; by contrast, the United States is generally estimated to have about 88 such launchers. The Soviet launchers can launch a variety of missiles, some armed with high explosives, some with chemical weapons, some with nuclear weapons. (One estimate is that the Soviets can deploy some 3,000 such nuclear-armed missiles of a significantly longer range than our present Lance missiles.) And in the absence of any agreed limitation, the Soviets are in a position to increase their inventory to any level they may consider necessary. Is it really wise to allow the Soviets to retain an immense ratio of advantage in this category of weaponry?

(Gorbachev's offer last week to Secretary of State Baker to unilaterally reduce the number of Soviet short-range missiles by 284 will somewhat reduce the existing imbalance; but it does not negate the desirability of a negotiated equal solution to this problem.)

It is argued that a U.S. ability to initiate an exchange of nuclear weapons, however militarily ineffective, will add a necessary rung to the ladder of graduated nuclear deterrence. But is it not possible to use other nuclear weapons of any range desired, if all that is required is to be able to initiate a nuclear exchange? We have an inventory of such weapons of every conceivable range. The principal deterrent to war with the Soviet Union, including both conventional and nuclear war, must in the end rest on our diverse and survivable panoply of strategic forces.

Would not we and NATO be more secure with a low but equal ceiling on the short-range missiles of both sides? The Soviets may not agree to this, but why refuse negotiations aimed at such an outcome?

A further question has been raised by Sen. Sam Nunn, Rep. Les Aspin and others, concerning the timing of stabilizing conventional-force reductions relative to negotiation on the limitation of short-range nuclear missiles. They are correct in arguing that the principal reason NATO needs short-range nuclear

weapons is the great superiority of Warsaw Pact conventicnal forces over NATO conventional forces. The argument over whether to negotiate reduced equal ceilings on short-range nuclear forces would disappear if Warsaw Pact and NATO conventional forces were reduced to equal levels. But if we were able to achieve agreement on equal levels of short-range nuclear missiles in Europe at about the level I suggest we aim at, I see no reason why we should deny ourselves the benefit of the one-sided Soviet reductions implied by such an outcome until we have achieved a more ambitious (and I believe time-consuming) goal of conventional-force reductions.

Achieving "stabilizing reductions in conventional forces" is an important -- I believe the most important -- of NATO goals. We have spent years negotiating a mandate for such talks in the framework of the Helsinki process. Negotiations between NATO countries and the Warsaw Pact countries are about to begin. These negotiations are properly multilateral -- not bilateral between Washington and Moscow. On the NATO side, most of the conventional forces are non-U.S. forces; it would be improper for us to take over the negotiations from our NATO allies; they would resent any such American action.

Multilateral negotiations have historically taken much time. The Soviets some months ago announced a target of significant unilateral conventional-force reductions. But those reductions, if carried out, would still have left the Soviet Union with a dangerous superiority in tanks, self-propelled artillery and other important items. In Moscow last week during Baker's visit, Gorbachev announced a proposal for much deeper multilateral reductions in Europe. Whether this opens a prospect for a prompt resolution of these difficult problems will require intense study by NATO.

Behind the short-range missile issue is the question of whether the Soviet Union has really changed its spots. Should we try to encourage what appears to be constructive change in the Soviet Union, or should we be cautious until we know more? Will Gorbachev survive as the unquestioned arbiter of political decisions in the Soviet Communist Party and thus in the Soviet Union? If so, what will his objectives be, and if not, what direction will the Soviet Union take?

I doubt that this set of questions presents us with a real issue. We can both be cautious, not letting down our guard, and at the same time explore with the Soviets whether they are prepared to negotiate agreements which would, on balance, be helpful to us and acceptable to Gorbachev. Caution and exploration of the possible are not necessarily contradictory aims.

Senator BIDEN. Thank you very much.
Ambassador Kampelman.

STATEMENT OF HON. MAX M. KAMPELMAN, FORMER HEAD OF DELEGATION AND DEFENSE AND SPACE NEGOTIATOR

Mr. KAMPELMAN. Thank you, Mr. Chairman.

It is a privilege for me to accept your invitation to testify before this committee today on the important subject of arms control and the direction it should take.

My testimony will be based on my experiences. It will be brief, and serve as a foundation for our discussion, and I would welcome any questions that it might suggest.

My appearances, both formal and informal, before your committee have always been stimulating and constructive.

I am pleased to note that the President and the Secretary of State are going forward with the negotiations that were underway when they assumed office on January 20.

In the nuclear and space talks we had completed, with the assistance of the Senate, an INF Treaty which reduced to zero all nuclear missiles having a range of 500 to 5,500 kilometers.

In the strategic area, covering ranges above 5,500 kilometers, we had arrived at a joint draft text of a treaty that was more than 300 pages long, with a fair amount of significantly agreed language, and with brackets reflecting differences.

It is my understanding that when these negotiations renew in late June, the joint draft text will continue to be the basis for the talks, which I consider to be a tribute to the intensive care and work that went into its writing.

In Geneva, there were additional talks underway dealing with nuclear testing. It is my understanding that those talks, which may well be near conclusion, will also be continued.

It is my hope that they will, in the near future, result in a text which will permit the Senate to ratify the Peaceful Nuclear Explosion Treaty and the Threshold Test Ban Treaty.

It is not my intent to discuss here the issue of ballistic missile proliferation, chemical weapons or conventional forces, other than to note with approval that these talks are proceeding as well.

There has been some criticism of the administration because of the delay in renewing the Geneva talks. I do not share that criticism, although I obviously would have preferred an earlier start to keep the momentum going.

It is important that the new administration be firmly committed to every aspect of the proposed START Treaty that we began drafting in 1985. The issues are complicated, many are novel. In the main, we were dealing with security problems that no nation ever had to face before.

John Tower, Ron Lehmen, Reed Hamner, and the rest of us who worked on the treaty believe that what we were producing was in our national interest, and reflected the judgment of President Reagan and the recommendations of his advisors.

It is President Bush, and Secretaries Baker and Cheney, however, who will have to defend that treaty before this committee, should one evolve out of the negotiations.

That treaty must, therefore, reflect their views and convictions so that they can speak with certainty as they defend their recommendations to the Senate.

There was no need for haste. There was a need for care, and I have every reason to believe that the administration's review proceeded conscientiously and responsibly.

The present text of the proposed START Treaty agreements between the United States and the Soviet Union provides for approximately 50 percent reductions in the most destabilizing of our weapons systems, together with a throw-weight associated with them.

The negotiations produced a series of significantly intrusive verification, inspection, and data exchange provisions which were in our interests.

That process was not completed, and will be a primary subject of the negotiations that are continuing.

That which has been completed is a product of full interagency participation, close consultation with the Congress, and serious discussion with our allies.

I do not believe that the provisions already agreed upon need to be significantly revised, and to do so would invite a Soviet reexamination of other provisions, and a pressure for concessions not in our interest to make.

The key remaining areas to be negotiated in Geneva will deal primarily with mobility, air-launched cruise missiles, and further verification specificity.

The Soviets would add sea-launched cruise missiles to the list of outstanding issues. We all, I believe, understand the need to permit and limit land-mobile ICBM's, accompanied by a reasonable verification regime.

Our objective is to encourage movement on both sides toward less vulnerable systems. It is urgent that the Senate, the House, and the President come to an agreement on what the American land-based mobile ICBM system will be, and how to improve its survivability.

In the ALCM field, we look for reasonable and equitable counting rules which will protect our ability to choose options for slower air-breathing deterrent systems.

Let me say a word here about verification. Our goal should be to balance and reconcile necessary verification with operational costs as we evaluate our national security interests. We need mutually reinforcing constraints to ensure that no cheating of a militarily significant scale could occur without detection, and then adequate lead time for appropriate response.

This is attainable.

In Geneva, the United States informed the Soviets that we could not conclude a strategic arms reduction agreement without a satisfactory resolution of the Krasnoyarsk radar problem. I hope and believe this policy will continue.

It is my opinion that a START agreement is desirable and obtainable within the next year without crippling the ability of our country to proceed with this strategic defense initiatives, study, research, and exploration.

It will, however, probably be necessary for us to agree not to deploy any SDI system for a designated period of time. The real problem in this area of defense, in my opinion, is not the SDI program.

The fundamental question is much wider in scope, and must be addressed. New technologies will continue to emerge, and it is essential that we and the U.S.S.R. find mechanisms to deal with these new developments in a stabilizing fashion.

Talks in this direction require broad exchanges on the political, military, technological, and scientific levels of our two countries. They will take time.

The START Treaty should stand on its own merit, and should not be held hostage to those essential talks dealing with strategic defenses, and the impact of new technologies on our respective military forces.

In this connection, let me also say that a START Treaty with the reductions being contemplated should not be held hostage to the conventional arms reductions talks now underway in Vienna. I would, however, not wish to proceed with START reductions deeper than the 50-percent reductions now on the table, without first being assured of greater conventional parity at reduced levels on the European continent.

That, Mr. Chairman, concludes my formal statement, and I would welcome using that statement to go on with further discussion and questions.

[The prepared statement of Mr. Kampelman follows:]

PREPARED STATEMENT OF MAX M. KAMPELMAN

Thank you Mr. Chairman. It is a privilege for me to accept your invitation to testify before this Committee today on the important subject of arms control and the direction it should take. My testimony will be based on my experiences. It will be brief, but I would welcome any questions that it may suggest. My appearances, both formal and informal, before your Committee have always been stimulating and constructive.

I am pleased to note that the President and Secretary of State are going forward with the negotiations that were underway when they assumed office on January 20. In the Nuclear and Space talks, we had completed, with the assistance of the Senate, an INF Treaty which reduced to zero all nuclear missiles having a range of 500-5500 kilometers. In the strategic area covering ranges above 5500 kilometers, we had arrived at a joint draft text of a treaty that was more than 300 pages long with a fair amount of significantly agreed language and with brackets reflecting differences.. It is my understanding that when these negotiations renew in late June, the joint draft text will continue to be the basis for the talks, which I consider to be a tribute to the intensive care and work that went into its writing.

In Geneva, there were additional talks underway dealing with nuclear testing. It is my understanding that these talks, which may well be near conclusion, will also be continued. It is my hope that they will, in the near future, result in a text which will permit the Senate to ratify the Peaceful Nuclear Explosion Treaty (PNET) and the Threshold Test Ban Treaty (TTBT).

It is not my intent to discuss here the issue of ballistic missile proliferation, chemical weapons or

conventional forces other than to note with approval that these talks are proceeding as well.

There has been some criticism of the Administration because of the delay in renewing the Geneva talks. I do not share that criticism, although I obviously would have preferred an earlier start to keep a momentum going. It is important that the new administration be firmly committed to every aspect of the proposed START Treaty that we began drafting in 1985. The issues are complicated; many are novel. In the main, we were dealing with security problems that no nation ever had to face before. John Tower, Ron Lehman, Reed Hanmer and the rest of us who worked on the Treaty believed that what we were producing was in our national interest and reflected the judgments of President Reagan and the recommendations of his advisors. It is President Bush and Secretaries Baker and Cheney, however, who will have to defend that Treaty before this Committee should one evolve out of the negotiations. That Treaty must, therefore, reflect their views and convictions so that they can speak with certainty as they defend their recommendations to the Senate. There was no need for haste. There was a need for care and I have every reason to believe that the Administration's review proceeded conscientiously and responsibly.

The present text of the proposed START Treaty Agreements between the United States and the Soviet Union provides for approximately 50% reductions in the most destabilizing of our weapon systems together with the throw weight associated with them. The negotiations produced a series of significantly intrusive verification, inspection, and data exchange provisions which were in our interest. That process was not completed and will be a primary subject of the

negotiations that are continuing. That which has been completed is a product of full inter-agency participation, close consultation with the Congress, and serious discussion with our Allies. I do not believe that the provisions already agreed upon need to be significantly revised and to do so would invite a Soviet reexamination of other provisions and a pressure for concessions not in our interest to make.

The key remaining areas to be negotiated in Geneva will deal primarily with mobility, air launched cruise missiles (ACLM), and further verification specificity. The Soviets would add sea-launched cruise missiles to the list of outstanding issues. We all, I believe, understand the need to permit and limit land mobile ICBMs accompanied by a reasonable verification regime. Our objective is to encourage movement on both sides toward less vulnerable systems. It is urgent that the Senate, the House and the President come to an agreement on what the American land based mobile ICBM system will be and how to improve its survivability. In the ALCM field, we look for reasonable and equitable counting rules which will protect our ability to choose options for slower air breathing deterrent systems.

Let me say a word here about verification. Our goal should be to balance and reconcile necessary verification with operational costs as we evaluate our national security interests. We need mutually reinforcing constraints to insure that no cheating of a militarily significant scale could occur without detection and adequate lead time for appropriate response. This is attainable.

In Geneva, the United States informed the Soviets that we could not conclude a strategic arms reduction agreement

without a satisfactory resolution of the Krasnoyarsk radar problem. I hope and believe this policy will continue.

It is my opinion that a desirable START agreement is desirable and obtainable within the next year without crippling the ability of our country to proceed with its strategic defense initiative study, research and exploration. It will, however, probably be necessary for us to agree not to deploy any SDI system for a designated period of time. The real problem in this area of defense, in my opinion, is not the SDI program. The fundamental question is much wider in scope and must be addressed. New technologies will continue to emerge and it is essential that we and the U.S.S.R. find mechanisms to deal with these new developments in a stabilizing fashion. Talks in this direction require broad exchanges on the political, military, technological and scientific levels of our two countries. They will take time. The START Treaty should stand on its own feet and should not be held hostage to those essential talks dealing with strategic defenses and the impact of new technologies on our respective military forces.

In this connection, let me also say that a START Treaty with the reductions being contemplated should not be held hostage to the conventional arms reduction talks now underway in Vienna. I would, however, not wish to proceed with START reductions deeper than the 50% reductions now on the table without first being assured of greater conventional parity at reduced levels on the European continent.

Senator BIDEN. Thank you very much. I should say to my colleagues, that I know you have an important appointment at 3:30, and we will try our best to accommodate your making that, and you are now in the position that even if we do not accommodate you, you can get up and walk out.

You always were in that position, but it was a little more difficult last time.

All kidding aside, we will try very much to move on.

Let me start with you, Ambassador Nitze, if I may, and again, compliment you on your statement, which was the same article that I read just a couple of days ago.

I assume that you are somewhat encouraged by movement toward what seems to be a compromise between us and the Germans on this SNF question, but I suspect that you might agree that the dispute will be papered over rather than ultimately solved, for the purpose of achieving a smoother meeting.

But once the summit is passed, and NATO begins to address, seriously, this question, you are proposing that we get allied agreement to negotiate reductions down to equal ceilings, putting aside for the moment the question of linking SNF to progress in conventional cuts. I would like to focus on why a small or smaller number—but yet a residual number—of SNF missiles are really required. That is what I would like to talk with you about.

As I understand it, you see value in us linking it both to conventional, but also coming down for other reasons, for military reasons, down to equal ceilings—that is, missiles, SNF missiles—but that you think that the Germans, ahead of time, should agree to somewhere in the range of 200 remaining missiles on each side.

As I said, putting aside for a moment the linkage of that to conventional forces, I would like to, if I may, focus on why a smaller number is required, or any number is required.

You pointed out that the principal deterrent to conventional attack must ultimately depend on our strategic forces. And earlier this week we had a fascinating discussion with some military experts about whether, if conventional balance is achieved, SNF missiles are needed at all.

Indeed, banning such missiles would improve our ability to mount a conventional defense, because the Soviets could not use conventionally armed short-range missiles as the leading edge of a conventional attack.

Furthermore, some believe that a zero solution would make verification of such an SNF agreement much easier. Surprisingly enough, in a program that I appeared on recently with Richard Perl, his argument was, "If you negotiate, it is better to negotiate to zero, than to have any SNF weapons left, if you are going to negotiate."

So, my question is, Why do we need equal levels above zero? What is the danger of a zero solution. Is the danger that the Soviets may try to include artillery and aircraft, or is there some unique military function served by SNF missiles, that prevents us from wanting to go to zero, assuming we had a conventional balance?

Mr. NITZE. As I said in my statement, there are two issues involved here. One is a political issue. And that is the effect of this agreement between the continental Europeans, members of NATO, and the noncontinental members.

And this division across that line, I think, is tending to be an important and significant difference, and if we do not work out a solution, I think promptly, that will get so solidified that it can be a long-range real problem for the continuance of NATO down the line it ought to go.

Therefore, I think that we ought to do everything we can in order to relieve that tension within NATO for political reasons as promptly as we can.

And thinking about it, I thought that the best way of doing that is taking an initiative in removing the aspect of that division which is most politically significant in Germany. And that is our refusal, adamantly, to negotiate under any circumstances with the Soviets on the issue. And that, I think, we ought to do promptly, in order to relieve that political problem.

Now, the other question is whether, when we negotiate with the Soviets, we ought to say now that we want to negotiate for equal ceilings, or whether we want to negotiate toward zero level. I think it would be more divisive within the alliance, and within the United States, if we were to say that we wanted to negotiate now for zero.

Senator BIDEN. I see.

So, politically, you are saying that one of the reasons is a political reason, because just as we need to negotiate to solve a political problem in the continent of Europe, we need to agree not to go to zero to solve a political problem in the United States and the alliance.

Mr. NITZE. No, I am just saying there are various considerations.

Senator BIDEN. But that is one of them.

Mr. NITZE. That is one of them, with respect to whether to go to—to ask the Germans—for us to agree with the Germans to go to zero.

They do not want to go to zero. Mr. Kohl, and I think everybody else in Germany, has resisted the idea of going to zero. They do not want to go to zero at the present time. They want to go to equal levels, and I do not see any reason for not doing that.

Also, I suspect that it is more consistent with what the Soviets want. The Soviets have taken the line that (*a*3) we have won the argument as to whether the way in which to negotiate was for equal reductions or to equal end points, at the Reykjavik summit meeting.

That was a big fight during that all-night session. That was one of the main victories that we won. And I think the Soviets have taken that seriously, and their whole position in the conventional force reductions is to eliminate the disparities on the two sides. And I think this position of negotiating for equal levels in amongst this range, this category of weapons, is consistent with the positions they have taken in the conventional force reductions.

And I believe they are apt to agree to it. So that net, this was the best solution, the best set of proposals that I could, in my own mind, come up with.

Senator BIDEN. Well, I do not disagree that it is, from my perspective at least, the most rational approach, given the circumstance we find ourselves in.

But if I can pursue with you the issue just a little bit more—I spent some time in Brussels, just 6 or 8 weeks ago, meeting with everybody I could. And I think I met with about everybody.

And you are absolutely correct, to the best of my knowledge, that not only at NATO, but Kohl himself does not want to go to zero.

And yet, what is propelling our position here is that we are afraid, once we get into negotiations, that we are on a slippery slope that will end at zero, even though we are all saying, and acknowledging, that Kohl says he does not want to go to zero, that all of our NATO partners, to the best of my ability to count their heads and speak to them individually, their permanent reps there, do not want to go to zero.

Yet, almost all acknowledge privately that we better negotiate, or there is going to be a problem—a political problem.

But I would like to take it a step further. When I ask people why do you not want to go to zero—whether it was General Galvin, for whom I have a great deal of respect, through Mr. Verner—with whomever I spoke.

Why not go to zero? I said, "Please, let us just speak about this in raw, military terms. Assume there were no political considerations."

If we were able to arrive at lower levels of equal force structures in the European theater between Warsaw Pact and NATO forces—conventional forces—the question then is, if I can be the devil's advocate for a moment, why not go to zero, because the original rationale for the weapons related to the overwhelming conventional superiority that the Warsaw Pact forces had, and our inability to follow through on a 1952 decision that we would meet those conventional forces?

Now, if you get the forces down, and at equal levels, and add to that that the Soviets now have an overwhelming superiority in these very weapons—why is it, particularly since you yourself pointed out, we have other strategic weapons, and weapons that are essentially assigned to the European theater—dual-capable aircraft on ships, aircraft carriers, sea-launched cruise missiles, and strategic missiles sitting in the bellies of submarines, all essentially by anyone's definition in the European theater, although not specifically assigned to NATO command.

Why is it, if you have lower levels at equal numbers of conventional forces, with this additional array of weaponry that we have, for military reasons, why does it not make sense to go to zero on short-range nuclear missiles?

Mr. NITZE. Frankly, I think I did say that under the conditions of equal stabilizing outcome in the conventional forces, we ought to reconsider this. I forget exactly what my words were.

Senator BIDEN. OK. That is what I was not sure of.

I am sorry I did not understand it. I would have saved a lot of time with my question. I am sorry.

Mr. NITZE. But there is a point as to how confident can you be that there are not only equal conventional levels, but that they are stabilizing? And that may be difficult to achieve.

Senator BIDEN. I agree.

Mr. NITZE. So that if there is some doubt about it, I do not see why it would be a bad thing to have equal levels of this range of weapons. You certainly do not want to have unequal ones.

Senator BIDEN. I agree. OK, I now understand more clearly, and I find that very helpful.

One more question, Mr. Ambassador, and then I have a question for you, Ambassador Kampelman, if I may—and I will yield ~~to~~ my colleagues.

The most important hurdle, Ambassador Nitze, it seems that we have to overcome in order to get a START agreement is to resolve the Soviet concern about our effort to build strategic defense forces to which Ambassador Kampelman made reference.

And 17 years ago, when we began our nuclear arms control efforts in earnest, both we and the Soviets accepted the proposition that in order to achieve limits and then reductions in offensive arms, we must impose limits on strategic defenses.

Now, that logic, as you know better than anyone here, led to the ABM Treaty. Former Secretary McNamara told us on Monday that he did not believe that the Joint Chiefs today would accept a situation in which we reduce our offensive weapons, but the Soviets would be free to build and then deploy strategic defenses.

Now that both of you have left the Government, and the Bush administration seems to be moving away from a reinterpretation—I say that, but I am not sure which is the father of the thought, but it seems to be moving away from the reinterpretation—of the ABM Treaty, I want to ask you both, but first you, Ambassador Nitze, what you think about whether or not it would be wise to reaffirm, affirmatively reaffirm, the interpretation, the traditional interpretation, and in turn, I believe, solve this problem.

We still can do plenty of research on SDI, and should we not get past this interpretation debacle and debate SDI on the merits? Would you have any trouble with a U.S. commitment to stay within the traditional interpretation of the ABM Treaty?

Mr. NITZE. Well, you know, having reviewed the negotiating record, I came to the conclusion that (*a*) it did not in any way indicate that the Soviets had bound themselves in a method, in a way that they would consider binding upon themselves.

And I found that to my surprise, after I had gone through the negotiating record. So, I have never accepted this as being a correct—that what you call the traditional interpretation is correct.

In fact, Strobe Talbot cannot understand why I changed my viewpoint, because I had been for what had been the accepted interpretation.

But having examined the negotiating record, to my surprise, I found there was nothing in it to indicate that the Soviets had in fact agreed to a binding—any binding—commitment along those lines.

Now, having gone into it further, trying to find out whether there was any definition of a component of a system based upon other physical principles, there is no way in which you can derive from the language of the treaty a definition, or any description, even, of a component of a system based upon other physical principles. We did not know how to do it them, and we do not know how to do it now.

I did agree with the Soviet suggestion, 2 or 3 years ago, that what we ought to do is sit down and go over all the now-foreseeable components of systems based upon other physical principles, and go through those and define them in a manner acceptable to both sides, which would fill this gap in the treaty.

Now, I still think that is what we ought to do, but I think that is the way in which, if one is going to agree to something, one wants to be sure that both sides agree to something they both understand, and there is not that confusion about this.

One does not want to continue these inherently contrary views about what language in a treaty means. But it is a difficult and complicated issue to work this one through.

Now, it is not that I do not want to see us postpone, you know, for the next 10 years. I do not think there is any point in our getting into an argument with the Soviets about what happens in this field over the next 10 years. I do not think it is going to do us any good.

I think that we can work it out with them, perhaps not in a very precise way, but to do it precisely, so that there is not any basis for a confusion between the two sides will take a very careful negotiation.

Senator BIDEN. If I can attempt to divide the question here, if you will—as I understand you, you are saying your reading of the negotiating record leads you to the conclusion that from the standpoint of treaty obligations at this moment, the Soviets do not feel—did not at the time feel they were binding themselves to what became known as the traditional interpretation, ergo, we are not legally bound to the traditional interpretation—correct?

Mr. NITZE. That is correct.

Senator BIDEN. Now, if I can put that aside for a moment, and move to the second question, from a strategic, not legal—from a strategic point of view, if you will, would you be willing, if we could, to your satisfaction, get an agreement settling that question with the Soviets, would you be willing, if the Soviets were able to, and we could write such language, limit themselves to what was constituted in the past of the traditional interpretation, that we then would be willing to limit ourselves to the traditional interpretation if that could be, to your satisfaction, put in a legal framework binding both nations now?

Mr. NITZE. I would.

Senator BIDEN. OK.

The reason I think that is important, to state the obvious, but for the record, I know you know why, better than I.

But the reason I think it is so important is that there are two arguments going on here. Those who argue the reinterpretation because they want the end product—the end product being able to research, develop, and deploy the SDI, and those who argue against the traditional interpretation because they believe it is not legally binding, whether or not they want to be able to develop and deploy an SDI system.

As I understand it you are worried more about the legally binding aspect of this, so the Soviets are not going off here, and we are binding ourselves, than you are about whether or not it is important to develop SDI and deploy SDI.

And they are two separate issues.

I do not want to misinterpret it.

Mr. NITZE. No, I thoroughly agree with your statement, except that I would say that there are other issues.

One issue is the length of time.

Senator BIDEN. Yes.

Mr. NITZE. And the third issue is what happens after the expiration of that length of time.

Senator BIDEN. Yes, I——

Mr. NITZE. And there are a lot of issues in connection with both of those questions, which we have not discussed.

Senator BIDEN. Which leads me——

Mr. KAMPELMAN. May I comment on that?

Senator BIDEN. Yes, I would like you to.

Mr. KAMPELMAN. You have put your finger on a very complicated subject where there has been a great deal more noise than substance.

And your question goes to substance, and it is time we did that now, as a society.

Let me share with you informal discussions I have had with the Soviets on this issue, where in a sense we both agreed that it is kind of useless to argue what was intended by the parties in 1972.

We will not agree. We are, today, arguing close to what the Soviets felt was the treaty in 1972. They are arguing a position, perhaps, close to what we felt in 1972. And it is useless for us, it seems to me, and fruitless, and endless in time, to try to deal with that subject.

It is also divisive in our society. And I do not know that you could get a treaty through the Senate, to be practical about it, which attempted to deal with that subject.

And what is, in our discussions, in my discussions with the Soviets, what seems to come out, at least on a personal level, not on a government-to-government level, is the view that why argue about what was intended in 1972? Let us rather address what is in both of our national interests in 1988, 1989.

Using the ABM Treaty as the focus of it—I explained to them, for example, how our Constitution has evolved. We could have endless arguments about whether our Constitution as interpreted today is what the Framers intended. It is useless for us to get into that kind of an argument, and it is useless for us to get into the argument with respect to what was intended in 1972.

Now, in my view, what is practical is to agree for both sides not to deploy for a period of time. During that period of time, I would like to address not only the question that you and Paul Nitze have been discussing, which is really not easy to define as traditional or nontraditional for another reason.

Clearly the ABM Treaty has a specific provision with respect to other physical principles. And we do not have anything to go on with respect to the definition, as Paul pointed out, of what a component is based on other physical principles.

Another reason why you have to really sit down and negotiate this issue afresh—it is going to take time. That should be done. And beyond that, I think we have to deal, as my statement indicated, with the question of how do we deal with the new technologies as they evolve? Because SDI is today's new technology, and tomorrow there will be other new technologies.

It is hard to keep these things in a bottle. We have got to find some way of permitting the new technologies to evolve in a stabilizing manner.

So, my view would be—and I have urged this upon the Soviets, and I think it is practical—I do not want to predict what the Soviets will accept or not, but I believe, personally, they would accept—I do not know—I believe they would accept an agreement for no deployment for a certain period of time, which gives you a measure of security, during which time we go negotiating this very serious subject.

Senator BIDEN. Well, I do not disagree with the thrust of what you said. You are in an immensely better position to make educated guesses about what the Soviets would or would not do than I am.

But one of the things, it seems to me—and I will yield at this moment—as soon as I finish this comment—to my colleague, Senator Kassebaum—one of the things it seems to me that we have to do up here is get a little practical as well.

The first judgment that we have to make, and the administration has to make—separately, obviously—is: Does it make sense for the United States, in order to get the START agreement it wants—assuming we know what that is—does it make sense to forgo as part and parcel of getting that agreement, the deployment of SDI?

Whether or not there were an ABM Treaty, does that make sense for us? And it seems to me, once that hurdle is crossed, you have the time, and clearly the energy, to deal with what ultimately must be dealt with—the underlying question of (*a*) what did ABM mean, and (*b*) how will ABM, no matter what it means, apply to future technologies that we know are going to come about?

They seem to me to be able to be, for the purposes of negotiation between this body and the President, between the President and the Soviets, separable issues in practice, at this moment.

Am I wrong about that?

Mr. KAMPELMAN. Senator, let me say to you that I believe we have crossed that hurdle.

Senator BIDEN. I hope so.

Mr. KAMPELMAN I believe that the United States has decided now—the previous administration has decided—that it is prepare to make a mutual commitment not to deploy for a period of time, during which time START will go into effect, during which time the other talks might be continuing.

I believe we have come—the only thing we did not have in detail is anything about how the other talks would begin, or when they would begin. But I believe that is where we were heading, in my view.

Now, there is still a question to be resolved, which is not simple; namely, the definition of "deployment."

Senator BIDEN. I agree.

Mr. KAMPELMAN. We are not going to deploy it, but what is the definition of "deployment"? And we would have to go through that exercise.

But we understand we would have to go through that exercise.

Senator BIDEN. And I might note for the record, from a constitutional standpoint, I disagree with both of you about whether or not—no matter what was found in the negotiating record, what impact that does or does not have on the treaty that the Senate

ratified or not ratified—but that is another discussion and argument. But I am not sure it relates.

Mr. NITZE. I do not think there is really a disagreement about it.

I think I and everybody on the last executive branch side agrees that as a matter of domestic law, the record as approved by the Senate is a matter of domestic law.

It does not mean it is a matter of international law, but it is a matter of domestic law.

Senator BIDEN. Well, I have more questions, but I yield to my colleague.

Senator KASSEBAUM. I will just be brief. But it is such a wonderful opportunity to hear two really very valuable treasures, almost, as far as the knowledge that both of you bring to this whole arcane issue of arms control.

Ambassador Nitze, you have been at it for many years, and Ambassador Kampelman. I would like to ask you, speaking on interpretation of treaties—Senator Biden and myself, Senator Robb, in fact, every member of the Foreign Relations Committee, sent a letter to the President yesterday, urging that he ask for a clarification from General Secretary Gorbachev about Mr. Shevardnadze's statement last week, which I am sure you are very familiar with—his stating that an attempt, he said—asserted—the modernization of the short-range nuclear forces in Europe was "an attempt to circumvent the agreement on medium-range missiles," and that such modernization would place in question whether the Soviets would then eliminate the SS-23's as under the terms of the INF Treaty.

Perhaps you already commented on this, but I did not see it in your statement, and I would like to have both of you give your views on that.

Mr. KAMPELMAN. May I comment on that, Senator, first?

First, let me say, I was not aware of the suggestion by the Senators that the President ask for clarification.

Senator KASSEBAUM. We just sent that yesterday.

Mr. KAMPELMAN. And I want to commend that move. I think it is essential to do.

I believe that Mr. Shevardnadze's statement was really appalling, when you think about it.

Senator KASSEBAUM. I thought so.

Mr. KAMPELMAN. And it gives the Soviets an opportunity to clarify it, because I cannot believe that is the message they want to leave in this atmosphere. It raises all kinds of doubts again about their living up to agreements, and all the rest. So, I am very pleased about that.

But I would like to use this opportunity, if I may, to make a comment about the issue, which I have not had an opportunity to make a comment about.

There was a recent article in Pravda which indicated that somehow implicit in the INF Treaty was an understanding between the parties that we would not get anywhere near the 500-kilometer range with respect to our modernization program.

Now, to the best of my knowledge——

Senator BIDEN. Excuse me, that was if they included the SS-23, that was the rationale.

Mr. KAMPELMAN. If they included, as part of the deal, by which they included the SS-23's, they are indicating that there was an implicit deal made that we would not go as close to the 500 kilometers.

When I was asked about this in notices, I had to say, which was true, that I knew absolutely nothing about this, and I was certain that if there had been anything near that kind of an understanding that I would have known about it, whether the understanding was between the Secretary of State and Mr. Shevardnadze, I do not know—but I would have known about it.

I read all of the transcripts of those meetings, even when I was not present. When I was present, of course, I heard things that were said.

Mr. KAMPELMAN. What I did this morning, since I did not want to depend only on my own knowledge—I called Ambassador Glickman in Brussels, who was involved in every single day's negotiations on the INF Treaty.

And he agreed with me that there was absolutely no reason for the Soviets to believe that anything we said could be so interpreted—but he went on to say to the contrary, which was interesting, and which I did not know—he indicated to me that when they were discussing the question of including the SS-23 informally, he, on behalf of the United States, suggested a kind of a mathematical formula which would supplement the testing of these missiles with respect to range.

The Soviets rejected that mathematical formula, and said they only wanted to deal with the testing that had taken place with respect to that system. He then said to them, he tells me today, "All right, if you do not accept it, we will go along with what you say. But then I do not want to hear you complaining if we come up with a modernization program that brings us close to the 500 kilometers."

Not that he believed we would be coming close to the 500 kilometers, or would be making that decision, but he did make that statement, clearly.

And he assures me that there is no unilateral statement by the Soviets, no indication at all by the Soviets which would justify any conclusion that one was conditioned upon the other—and I did want to make that statement before this committee this afternoon.

Senator BIDEN. That is interesting.

Senator KASSEBAUM. Yes, it is. It is very interesting.

You know, I do think it is terribly important to get this clarified, in many ways. It is, for one thing, a very irresponsible statement on the part of Mr. Shevardnadze.

It seems to me to probably be used as a threat, but one that clearly, given the atmosphere that exists in Europe today, can throw a lot of—do a lot of damage, and throw sand in everyone's eyes, I think.

And it seems to me that this is a clarification that is very useful—perhaps too clearly understood in the emotional context of the time. And so, Ambassador Nitze, did you have any comment to add to that?

Mr. NITZE. No.

The negotiating process is a very complex negotiating process. It was in the INF case, so that there are many discussions at various levels, and I am not aware of all those levels. I have also been trying to find out, but I have not gotten through.

Senator KASSEBAUM. I would only just add that—Ambassador Kampelman, in your statement, very much appreciated, and I suppose because I so much agree with it, that the real problem in this area of defense is finding mechanisms to deal with these new developments in technology. If we can have a mechanism where both the Soviet Union and the United States, or any major defense power—but clearly, we are the two who have to think through many of these things—can talk about them in the arena where we understand what each side is doing, it would add more stability than trying sometimes to get it all on paper, and crossing every "t" and dotting every "i."

It is the knowledge of that technology, and why it exists, and some sense of what each side wants to do with it, that has seemed to me to be a very important arena for stability.

And I am pleased to see you suggest that it requires broad exchanges. I do not know if you have given any thought to more precise mechanisms than that, but I am sure that it would be a very valuable suggestion.

Thank you.

That is all the questions, Mr. Chairman, that I have, other than to express again gratitude for all that both of you have done in this very important arena.

Senator BIDEN. Thank you very much.

Mr. KAMPELMAN. Mr. Chairman, with your permission, in accordance with our previous discussion, may I excuse myself?

Senator BIDEN. Yes.

Mr. KAMPELMAN. Oh, perhaps let me wait and see if Senator Robb has any questions.

Senator BIDEN. Do you have any questions for Ambassador Kampelman?

Senator ROBB. Mr. Chairman, I was not. I was just going to thank our distinguished guests for appearing before this committee.

I will have just one question as a followup to the one that you have already responded to, if I may. I am intrigued by your response to Senator Kassebaum's question about the clarification, and the additional information that you bring to bear on that question.

I realize that since both of you have had long and distinguished careers in public service, but to my knowledge now have no official portfolio, in either case, at the moment—would you be willing to speculate about what possible motivation might have been behind Minister Shevardnadze's statement that we are seeking clarification for at this particular point?

I find very little, it seems, to be accidental, in terms of pronouncements in my relatively brief experience in dealing with things that are said or done on the Soviet side, and is there something that we should be anticipating, or is this designed to send a signal of some sort, in your judgment? Or is there some other meaning?

I do not know what the answer to the question is. I am asking a question of first impression.

Mr. KAMPELMAN. May I respond first, Mr. Chairman, and then leave in accordance with our previous discussion?

Senator BIDEN. Yes.

Mr. KAMPELMAN. It is not typical of the Shevardnadze that I have been dealing with—I do not know about Paul's experiences—but that I have been dealing with now for quite some time, and I have been at meetings with him, and I have had one-on-ones with him going into the hours, so that I have met the man.

And I do not recall a previous effort where there was threat. I do recall—this is a very hard, tough negotiator, who obviously and responsibly carries out what he considers to be the best interests of his country. But I had never before seen a threat, and this surprised me, this statement of his.

I have to assume—and I do not know, but I assume—that this is part of the old thinking of the Soviet attitude toward Europe, which is to frighten Europe. This is why they lost the no-deployment fight with this frightening effort, and intimidation effort, and it is not hard for people to go back to the old line.

I also want to say this, if I may, philosophically. It is—I have watched the Soviets now for many years, really, since I was a teacher, many, many years ago, and as in many things, it is up and it is down, and it is sideward.

One must not assume, always, a steady course there. And one must not be too upset by the deviations from steady courses, and that is another reason why one must not assume that what you have today will be there tomorrow—that is, you have to be expectant, also, of possible changes that take place.

But other than that, I do not know that I have any real judgment to express on why I was surprised.

Senator ROBB. Thank you, sir.

Senator BIDEN. Paul, do you have any?

Mr. NITZE. I have spent a lot of time, also, negotiating with Mr. Shevardnadze, and I cannot imagine that he would have said this without having some explanation, and that there must be something, someplace, that I do not know about, but that I am trying to find, which would give him some excuse for saying this, but I do not know what it is, and I have not been able to find it.

Mr. KAMPELMAN. I would comment by saying that that he was told this is possible. That he has the evidence, however, I would just doubt very much.

Mr. NITZE. I do not know.

Mr. KAMPELMAN. But he did not go through a record, you can assume that.

Mr. NITZE. I just have the feeling that he has got something that he is going to pull out, and I do not know what it is.

Senator BIDEN. Thank you, Ambassador Kampelman.

Senator Robb, do you have questions?

Senator ROBB. No, thank you, Mr. Chairman.

I really was not planning to ask anything. I just wanted to take advantage of this exceptional opportunity with these two distinguished gentlemen, and I had other commitments, and I am going to have to leave myself.

I was going to pick up their testimony, and hope that I could find them in and around the corridors of Washington to follow up with some questions later on.

But I thank you for that opportunity, and I certainly thank both of these distinguished guests.

Senator BIDEN. Ambassador Nitze, I have three more points I would like to explore with you a little bit, if it is all right.

One is the last point you just made. None of us here have the experience with Shevardnadze that you do. And none of us have the experience with dealing with any Gorbachev or any high-level Soviet that you do.

But as an observer of a man like Gorbachev, who has put together, it seems to me very rationally, although categorized as boldly—but nonetheless very skillfully, a policy that has wooed and embraced and stroked Europe, I found it surprising that Shevardnadze would say what he said, and find it done out of whole cloth—not misinterpreted, possibly misinterpretation, but because it seems it is obviously so counterproductive in Europe for Shevardnadze to say what he said.

It flies in the face of everything they have been building, and it has had that kind of impact.

It is totally inconsistent with all the other gentle wooing they have been doing, and winning the "public relations game." In one fell swoop, they have made everyone raise the question of whether or not in the end do not those Soviets just return to being the same old Soviets that they have been for the past 40-some years?

And so I too am worried, and as a consequence have drafted an additional letter—which I have not sent it yet—to the administration to see if there is any reason why we should be expecting somewhere down the road where Shevardnadze pulls out a memorandum or cites a time and a date and a place, whether it is the lowest level negotiator to the Secretary of State.

I am shifting gears a little here, but I am still intrigued by what seems to be or is being given credit for being the impact that former Secretary Kissinger is having on this administration. He is credited, rightly or wrongly, for the President's holding fast on the issues relating to SNF and the Germans.

And he is being very forceful in his assertions about linking START to the establishment of a conventional balance. Now, do you think that the administration is likely to buy his argument on that, also?

Mr. NITZE. I do not have a crystal ball.

Senator BIDEN. Well, I guess it is not a fair question, now that I have formulated it.

Let me try it another way. Do you think that we should link START to a successful conclusion of a conventional balance in Europe? A successful conclusion to the talks resulting in a conventional balance in Europe? Should that be a precondition for START?

Mr. NITZE. I believe not.

Mr. Kissinger advocated that we should not ratify the INF Treaty until we had had some—gotten quite far in the conventional balancing and equalizing talks. I thought that was wrong, but

Mr. Kissinger clearly did not like the INF Treaty. I do not think he likes the START Treaty.

I think that even if we could negotiate all the unsettled terms in a way acceptable to us, I think that he is wrong about both of those.

But I had a TV confrontation with him the other day, and I did not think he made any sense then.

Senator BIDEN. Well, I thought he missed the point then. He kept saying, "How much further can you go down from 88?" Someone should have told him that there were a lot of warheads on top of those missiles. They were launchers, they were not total bombs.

Mr. NITZE. The main point was a different one, and that is, if you enter into negotiations that you have to agree with the position of the other side.

Good God. In negotiating the INF Treaty, what was it? It was a series of our insisting upon the provisions that we wanted, and certainly you do not have to agree with the other side.

Maybe you cannot get a deal, but you certainly do not have to agree with the other side. Second, it is not the negotiators who decide any of these things. It goes up the channels to the Secretary of State and the President and the Cabinet, so that before to agree with something of the other side, everybody on the U.S. side in the Government would have his hands on the thing.

The idea that we cannot reject a position that we do not want to agree to is asinine.

Excuse me.

Senator BIDEN. Well, I quite frankly—and this is me talking, and not you or anyone else, I am not trying to characterize anyone else's position, just mine—what worries me most about this refusal to negotiate is what I believe to be an underlying distrust for democracy in Germany, the notion that you are not able to articulate a position that is in the interest of the West that can be accepted by the German people that has as part of that position the existence of any short-range nuclear weapons.

It seems to me that whether or not Dr. Kissinger is correct in his assumption of the "automaticity," if there is such a word, of going to zero once you begin to negotiate—you are going to ultimately have to face the fact that there is a democracy there, called Germany.

And they are going to respond to their people, period. And I have had—I thought your statement pointed out very well that the history has been quite to the contrary.

When the case has been made to the German people that it made sense, because Soviets would not do something that was a precondition for something else being done, they have responded.

I cannot imagine the notion of, in the middle of a process of all of a sudden, the American people in Delaware or New York or Nevada being told, by the way, we are going to roll in Pershing II missiles, by the way, watch us move them in, watch us set them there, and watch us put them in place. The Germans did that—they did it, after it was clear that we told them what our negotiating position was.

Mr. NITZE. And they watched us negotiate, and they agreed—you know, we explained every move to them, with full consultation, so that they were fully in on the negotiations.

If you handle the negotiations with care, and fully consult with your allies, you know, it is not, and they are not going to walk away from you.

Senator BIDEN. I could not agree with you more.

But like I said, I still think that underlying all of this, whether it is Dr. Kissinger or whomever, there is, I think, an implicit fear of not only negotiating, but more fundamentally a fear of how that democracy will function, and how it can function.

I would like to go back to, just for a moment, the ABM issue, and the interpretation issue.

I referred repeatedly in our exchanges to deployment, and I did not mention testing, which was more inadvertent than intentional, and I want to clarify the testing issue. One of the things that the Soviets would have to be satisfied of, as we would want to be satisfied of, as they resume discussions on START and contemplate significant reductions in offensive weapons, is that we would not be in a position, after having tested important components of an SDI system, that we would not be able to, essentially overnight, to deploy, because we would have done all the preliminary work of testing.

It seems to me, concomitant with any agreement to set a time period within which we would refrain from deploying, is the notion that once we deployed, they would be able to counter that deployment, either through deployment of a defensive system, and/or through deployment of a system with offensive capability.

So, time seems to be a very important feature here, and so testing, it seems to me, is impossible to decouple from deploying. Am I right or wrong about that?

Mr. NITZE. I would have another view, and the reason for that is that the agreed statement (D) is, I think, unambiguous in asserting that there will be no deployment of systems or components based upon other physical principles without consultation under article XIV and amendment of the treaty under article XV.

So, the deployment—there is not any way of denying that these are not intended to be deployed without consultation and amendment of the treaty.

There still is the question as to what is a component.

Senator BIDEN. I understand that.

Mr. NITZE. That is not settled. But the deployment is banned by article D, and nobody on the—I think everybody agrees that article D is, to that extent, clear and obligatory on both sides.

So, deployment is in one category, testing is in another.

Senator BIDEN. I agree.

Mr. NITZE. Because——

Senator BIDEN. I think that should be the same.

Mr. NITZE. Statement D can be read to permit testing.

Senator BIDEN. I know it can be read, and I do not want to beat this to death—I know it can. It is argued by you and others that it can be read to permit testing.

The point I was trying to make in the beginning of this whole question on this subject was that if we concluded that there was a

START agreement that was in our interest would it make sense from your perspective to agree to refrain from testing as well as deploying, in order to get a START agreement that you thought was clearly in the mutual interest of our countries?

Mr. NITZE. There is another question, which I referred to before, and that is, we have got three issues with respect to space defenses.

One is the time period during which you agree not to deploy, and we know we have just been insisting upon 10 years, and we have been talking about 10 years from Reykjavik—it is more or less the same thing.

And then there is the question of what happens during—that you are authorized to do in the way of testing during the nondeployment period.

Senator BIDEN. Right.

Mr. NITZE. And there is the question of what you are authorized to do after the expiration of the nondeployment period.

With respect to that third question, Mr. Gorbachev, during the Washington summit in which we discussed these matters did say that each side after the expiration of the agreed period would be free to do whatever it wanted to do with respect to systems based upon—he said with respect to defenses in space.

So that he is on record as saying that either side can do what it wants to do thereafter.

Senator BIDEN. I understand that. I understand the first and the third.

What I am asking you about is the second.

Mr. NITZE. Within the agreed period.

Senator BIDEN. Within the——

Mr. NITZE. Well, there I have said that I think all of us agree that you cannot deploy during that period, within the treaty.

Senator BIDEN. Would you be willing to agree not to test within the period, in order to get a significant START agreement?

Mr. NITZE. That is not a matter of what is permitted under the treaty.

Senator BIDEN. No, I know that.

I am asking you a different question.

Mr. NITZE. That would go beyond the treaty, and there was a good deal, in the last administration, of resistance to going beyond the treaty in a way which was considered by many as being perhaps contrary to the U.S. interest.

Senator BIDEN. Either I am missing the point entirely, or I am gathering the point completely that you would rather not answer that question.

Mr. NITZE. Well, I would want to be specific about it. I want to understand what—if in agreeing to this with the Soviets, I would like to know what I am agreeing to.

Senator BIDEN. But if you knew what you were agreeing—you would not put it off the table?

Mr. NITZE. I would not put it off the table. Frankly, I would be perfectly willing to consider that.

But I would want to—and perhaps agree with it. But I would want to know what it is, specifically what you mean by testing, and what they are going to agree to, and I really would like to know

the answer to these other two questions—how long the time period is, and what happens after the time period.

I would like to understand those things. I think that one really ought to get a meeting of the minds on all three questions concurrently.

Senator BIDEN. I now understand your answer, and I appreciate it very much.

Do you have any further questions?

Senator KASSEBAUM. I really do not, other than to ask, because I was struck with this when I read your piece in the Post, Ambassador Nitze, and rereading it again, when you said that I see no reason why we should deny ourselves the benefit of one-sided Soviet reductions in part by such an outcome until we have achieved a more ambitious, and, I believe, time-consuming goal of the conventional force reductions.

And I would agree with that, and—now, would you see any need to work with START, and link the START and conventional force talks?

Mr. NITZE. No, I would not.

Senator KASSEBAUM. So, you are implying that this is a separate goal, and a more difficult one, really, than START?

Mr. NITZE. If we could work out a START agreement which we consider advantageous to ourselves and to NATO, and the West generally, I would not resist that, on the basis of wanting an addition to get some conventional results.

Senator KASSEBAUM. Well, I have wondered, though, because I do agree when you say you think that it is very important, and probably much more difficult to achieve—one, there are more parties involved, and so forth—but I have wondered if the START talks were not a useful means to sort of use as leverage, too?

If you can see that START could be completed, and could be successful, is it not sort of a carrot, so to speak, to say this can be achieved if at the same time we are going to be able to achieve some goals in the conventional negotiations?

Does it work that way at all?

Mr. NITZE. It is my impression that the people who are advocating this linkage, such as Mr. Kissinger, were not looking upon it as a carrot. They were looking upon it as a restraint upon getting prematurely hooked into a START agreement.

Senator KASSEBAUM. Well, I think that is true, but I would be looking at it from a little different angle, and I do not know if it makes any sense to look at it from that angle.

I guess that is what——

Mr. NITZE. Someone could see, after all—if negotiating both concurrently, if it really were a carrot, one would find that out during the negotiations.

Senator KASSEBAUM. Thank you very much.

Senator BIDEN. Mr. Ambassador, thank you very much.

Mr. NITZE. Thank you, Mr. Chairman.

Senator BIDEN. Thanks for coming over, Nancy.

We will recess for just 1 minute, here.

[A brief recess was taken.]

Senator BIDEN. The hearing will come to order.

Maybe we can open up the curtains, too. I know that Congress does not like much light shed on issues.

Gentlemen, welcome. I really appreciate your taking the time. I know that I have some idea how busy you all are.

Ffirst is the Hon. Jonathan Dean. Mr. Ambassador, it is hard to believe, but I met you and you might not remember this, when you were over at the MBFR talks the first time I went to Europe, which I believe was 1974, maybe—a long, long time ago.

You have an institutional memory and a heck of a lot of insight in this whole area, and I am anxious to hear what you have to say.

We will start with you, and then Mr. Gaffney, and then Mr. MccGwire, and then Dr. Steinbruner, in that order, if you are willing.

I do not want in any way to curtail you, but if you could summarize as much as you can to give us a chance to get as many questions, and maybe some interchange, if that turns out to be appropriate, or if there is any disagreement—you may all agree on everything. Who knows.

With that, why do we not start with you, Mr. Dean? We will start with you first.

STATEMENT OF HON. JONATHAN DEAN, FORMER U.S. REPRESENTATIVE, ARMS CONTROL ADVISOR, UNION OF CONCERNED SCIENTISTS, WASHINGTON, DC

Mr. DEAN. All right, sir.

Mr. Chairman, I would like to request that the longer report that I have made available be included in your record.

Senator BIDEN. Without objection. The entire report will be included in the record.

Mr. DEAN. Thank you, sir.

Mr. Chairman, the prospects are quite good for a step-by-step builddown of the East-West military confrontation in Europe through a combination of negotiated and unilateral measures.

The scope, the speed, and the orderliness of that development will depend mainly on NATO and the U.S. actions.

Given action by NATO, a first agreement in the Vienna force reduction talks along the lines of NATO's own proposals is possible within the next two to three years.

A second phase of further cuts is both feasible and desirable for a total NATO reduction in selected armament 40 to 50 percent below current levels. With the Warsaw Treaty coming to equal levels with NATO, this would mean reduction of 75 to 80 percent of their current total of tanks, artillery, and armored troop carriers in Eastern Europe and in Russia west of the Urals.

General Secretary Gorbachev proposed a reduction of these dimensions in his talk with Secretary Baker on May 11, and there is considerable evidence that he means it.

The NATO countries are not yet ready for cuts of this scope, although through them, they might save as much as 30 percent of the $300 billion they spend each year for defense in Europe, half of it spent by the United States.

Senator BIDEN. Thirty percent, Mr. Ambassador? Three-zero?

Mr. DEAN. Yes, 30 percent is my reckoning of how much they could save by a program of 50-percent reductions in selected armaments and manpower.

Partly NATO's reductions to—envisaged reductions of this scope is because some in the West fear there would be no stopping point in the reduction of conventional and nuclear arms, a point which you raised earlier, Mr. Chairman, leaving NATO defenseless against a still-powerful Soviet Union.

In the circumstances, they would prefer to maintain the East-West military confrontation in its present dimensions as a proven framework for cooperation between the United States and Western Europe, and among the Western European countries.

The motivation for this approach is understandable, but it is not a practical option. Too much has changed in Soviet positions and actions to hold the line without change on the NATO side. Inaction by the Western governments would be a recipe for dismantling NATO through competitive unilateral cuts by individual NATO countries under the impact of their own domestic political opinion.

Now, a second major reason why NATO is holding back on reduction of its own forces, which it would prefer to limit to 5 to 10 percent of its present holdings, is worry and uncertainty about the future of the Soviet Union itself.

It would appear that most of the plausible successors of General Secretary Gorbachev would continue the main lines of the Gorbachev policy. Moreover, it would be very difficult, perhaps impossible, for a less constructive, new Soviet leadership to push the Soviet people from the present stage back into a totalitarian mode, while making an effective claim on their loyalty and cooperation.

Nevertheless, the Soviet situation is volatile, and seizure of power by a group intent on reversion to confrontation and expansion cannot be excluded.

This uncertainty about the Soviet future is reason for caution in the Western countries and for thinking of how most effectively to ensure against a negative turn. But it is definitely not reason to hold back on negotiated force reduction while leaving Soviet forces intact for some future use.

To meet worries about the future of the Soviet Union, the best thing the NATO countries could do is to take full advantage of Gorbachev's flexibility to cut Soviet forces now, to such an extent, and in such a way that it would take a long time for any successor regime to build them up again and to gain a sufficient edge over NATO forces to feel confident about the outcome of an attack.

We should try to build maximum delay into a program of reductions and restructuring.

How can we get to what should be our goal in these talks—that is, reductions to a lower equal plateau of NATO and pact forces, where the Western countries can observe long-term developments in the Soviet Union with greater security and at lesser cost?

The most direct route is to move promptly to conclude a first agreement along the lines of NATO's present proposals, and then to move on to negotiate a second stage for which NATO has yet to develop a specific concept, but which could represent a continuation and deepening of stage I cuts.

The Warsaw Pact is suggesting somewhat larger stage I cuts in the armaments which NATO has proposed for reduction in Vienna than NATO has. A compromise on these reduction amounts appears entirely feasible.

But there is an obstacle. For a first stage, the Warsaw Pact is also proposing reduction of three additional force components which NATO is not now prepared to reduce. They are military manpower, combat aircraft and armed helicopters, and in a separate negotiation, tactical range surface-to-surface missiles.

We should analyze reducing these force components from the viewpoint of possible benefit and advantage to NATO.

Senator BIDEN. I am sorry. The first thing you said, before you mentioned aircraft, was manpower, but——

Mr. DEAN. Yes, sir, military manpower, active duty military personnel.

Senator BIDEN. Active manpower—thank you.

Mr. DEAN. Yes. Ground and air force personnel, to be specific.

We should analyze reducing these force components from the viewpoint of possible benefit to NATO. As regards manpower, NATO's published data shows that the Warsaw Treaty has manpower superiority of about 800,000. Since the Warsaw Pact is ready to reduce to equal ceilings, it would be to NATO's advantage to eliminate this superiority.

Moreover, the absence of provision for manpower reductions in its own program prevents NATO from making savings through cutting manpower costs, which comprise 50 to 60 percent of NATO defense budgets.

This omission rests on NATO's belief that manpower ceilings would be difficult to verify. Against the background of my own long, if frustrating, experience on the data issue and the NBFT talks, I think the NATO position on this matter is wrong.

It leaves untested Soviet willingness to accept intensive verification of data, once exchanged. Beyond this, the absence in NATO's proposal of residual ceilings on manpower detracts considerably from its military value, and if uncorrected will make it easier to circumvent.

NATO countries, Mr. Chairman, have many reasons for their reluctance to cut combat aircraft and surface-to-surface missiles. You have covered many of the points already, but on balance, it seems to me that there would be military advantage to NATO in cutting these weapons.

If the Warsaw Treaty is prepared to eliminate its superiority in armor and artillery, I see no convincing reason why NATO cannot offer a modest 10-percent reduction of about 400 tactical aircraft, in return for Warsaw Treaty aircraft reductions which would have to be 3 times as large—or a 10-percent reduction in equal numbers in surface-to-surface missiles in return for a pact reduction at least 25 times larger.

The Warsaw Treaty has a large numerical superiority in both these armaments. At the outset of a possible attack, it would use these delivery systems with conventional, chemical, or even nuclear warheads for a massive blow against NATO air forces, missile sites, headquarters installations—even before the pact tanks, which NATO worries about, had moved.

An advantage of this kind in the hands of the Warsaw Treaty, which NATO believes would be the first to attack, would be highly destabilizing in peacetime, and could be decisive in war.

We want to blunt the pact's capacity to attack with armored forces. Why not blunt its capacity to attack through the air?

Moreover, if on consideration we do believe it essential to deploy a modernized Lance missile, negotiation is probably the only feasible route to do so.

Mr. Chairman, reductions alone are not the full answer to cutting back the Soviet military potential in Europe, and interposing maximum delay to building it up again.

There should be a system of early warning and transparency in Europe, what I call a zone of military openness, of which one major feature would be an annual quota of 150 low-flying overflights for each alliance, covering the entire Atlantic to Urals region.

Senator BIDEN. You call it a zone of military——

Mr. DEAN. Openness.

Senator BIDEN. Openness.

Mr. DEAN. Yes, data exchange, overflights, observers with military headquarters, and exit and entry points would be the components of such a zone.

There should also be a system of constraints on forward deployment of especially threatening equipment, like tanks and tank transporters.

I would establish a restricted military area for this purpose. There should be a system, too, of controls over Soviet reserve and mobilization capacity, and of production of reduced armaments.

None of these features is included in current NATO proposals, except in the most fragmentary form.

To bring NATO agreement to this program of broader reductions, the Bush administration should take some specific steps, to include appointing a senior, Washington-based coordinator for the CFE talks, with access to the President, to coordinate among the Washington agencies, among the allies, and with the Soviets. Without this move, the system is too complicated to work.

Second, coming to an understanding with the UK and France for cooperation on what we might call a Euro-strategic nuclear deterrent.

Third, coming to an understanding with France and other European NATO countries to permit a European defense grouping to play an active role within NATO.

In conclusion, Mr. Chairman, the Soviet leaders seem quite ready to build down the East-West military confrontation in Europe, but the negotiation route will succeed only if we actively engage them.

Thank you.

[The report of the Union of Concerned Scientists follows:]

REPORT BY THE UNION OF CONCERNED SCIENTISTS

A TRIMMER NATO AT 40: BUILDING DOWN THE NATO-WARSAW PACT CONFRONTATION

SUMMARY

New NATO-Warsaw Pact negotiations covering force reductions in the area from the Atlantic to the Urals in Europe began on March 9, 1989 in Vienna. By agreement, these new talks are called Negotiations on Conventional Armed Forces in Europe (CFE).

The CFE talks got off to a good start, with a good deal of evidence that the Soviet Union and its allies are willing to make deep cuts in conventional forces, reducing their numerical superiority in several major weapons categories to equality with NATO at new low levels. This evidence includes General Secretary Gorbachev's December 1988 announcement of unilateral cuts, including the withdrawal of 5,000 tanks and six armored divisions from Eastern Europe, and the far-reaching negotiating position the Pact put forward at the outset of the CFE talks.

Consequently, if NATO takes the right approach to the new talks, there is a good opportunity to make deep cuts in the European confrontation and substantial savings in the more than $300 billion the NATO countries spend each year to defend Europe, including $150 billion from the United States. In the right form, deep cuts would increase security for the NATO countries, while also insuring against possible recurrence of a more negative Soviet policy.

The NATO Position

NATO's negotiating approach for the CFE talks is a good one as far as it goes. NATO is calling for reductions of Warsaw Pact and NATO tanks, artillery, and armored troop carriers to an equal level about 5-10% below NATO's current holdings of these armaments. If they can be achieved, the extremely large cuts in Pact armor and artillery which would be required to come to equality at NATO's slightly reduced level of these armaments would greatly ease NATO's fears of Pact attack.

We should vigorously support this aspect of NATO's negotiating program. But NATO's program does not go far enough toward assuring future NATO security or toward achieving real cuts in NATO defense spending.

The Pact Position

In his March 6 speech at the opening of the CFE talks in Vienna, Soviet Foreign Minister Shevardnadze indicated that the Warsaw Pact was willing to make first-stage cuts 10-15% below the level of the weaker side in selected armaments, among them, the tanks, artillery and armored troop carriers whose reduction is proposed by NATO.

Given their demonstrated flexibility, it seems probable that the Soviets may, for the purposes of a first-stage agreement, be willing to compromise on the somewhat smaller reductions of these same armaments which has been proposed by NATO. As applied to tanks, acceptance of the NATO approach would result in a cut of about 37,000 Pact tanks compared to about 2,000 NATO tanks and 30,000 Pact artillery pieces to only 830 for NATO, about 65% of all estimated Pact totals for the Western U.S.S.R. and Eastern Europe.

But Shevardnadze also argued that a first agreement should include reduction of military manpower, combat aircraft, armed helicopters, and surface-to-surface missiles, the latter in a separate negotiation. For its part, NATO is presently unwilling to reduce these force components. In addition, Shevardnadze proposed that. in a second phase of reductions starting from a base of equality, each alliance reduce a further 25% of its forces. NATO's proposal contains a generally-worded reference to possible further reductions if its first-stage proposal can be achieved. But NATO has made no specific proposal for a second-phase of cuts and there is a reason for that.

Weaknesses in NATO'S Position for the New Talks

1. NATO's approach to force cuts is too limited. During NATO's preparations for the new talks, Western military staffs urged that NATO limit its own reductions to 5-10% of its tanks, artillery, and armored personnel carriers, and this advice was followed by NATO governments. If this restriction is maintained in the future, the NATO allies would be locked by their own strategy into continuing military confrontation in Europe--at high levels of forces.

2. NATO's position has some faults of design:

a. The NATO approach to CFE as yet contains no specific proposals for early-warning measures. If these were agreed on at the outset of the talks, they could give the participants greater security during the negotiations. They would also give a boost to the negotiating process.

b. The NATO approach does not now provide for constraints on forward deployment of especially threatening Pact armaments, ammunition stocks or equipment. The sub-regions and the restriction on equipment of forces stationed on foreign territory which NATO proposes would not prevent such forward deployments.

c. Under the NATO approach, Pact armaments that could be used with decisive effect at the outset of an attack on NATO would not be reduced. These include tactical-range, surface-to-surface missiles, where the Pact has a 10:1 advantage over NATO, and combat aircraft, where the Pact also has numerical superiority.

d. The NATO proposal contains no provision for ceilings on units of the type reduced. The Pact could reestablish reduced tank units or even increase their number, using a smaller number of tanks but a larger number of supporting arms and infantry.

e. The NATO proposal contains no provision for manpower ceilings. This omission rests on NATO's belief that manpower ceilings would be difficult to verify. It leaves untested Soviet willingness to accept intensive verification. It would permit the Pact to increase the manpower of frontline combat forces even if the Pact wishes to reduce overall military manpower for economic reasons.

f. The NATO approach contains no provision for controlling the continuing production in the reduction area of armaments reduced by agreement. Soviet tank and artillery production would continue unrestricted.

g. The NATO approach as it now stands does not provide for full and detailed data exchange at the outset of the CFE talks, or other measures to monitor the unilateral reductions announced by Gorbachev. These are required to assure that the withdrawn forces will not return, and to develop more precise knowledge of remaining Pact forces.

Taken together, these shortcomings detract considerably from the military value of the NATO proposal and, if uncorrected, would make it easier to circumvent.

3. **The NATO approach would do little to reduce the costs of the NATO-Pact confrontation.** A 5-10% percent force reduction would produce very little savings in the defense budgets of the NATO allies. NATO has not proposed reduction of military manpower, although the Pact has done so. The absence of provision for manpower reductions would prevent NATO from making savings through cutting the manpower costs which comprise 50-60% of NATO defense budgets.

In sum, after the Pact reductions it calls for have been carried out, the current NATO position might permit indefinite continuation of the East-West military confrontation in Europe at a high level of forces. NATO's position fails to make a real test of the possibility of deep cuts favorable to NATO leading to a meaningful build-down of the confrontation. This minimalist position reflects both divergences among NATO members over the substance of the new talks and the absence of an agreed long-range concept of East-West relations in Europe.

NATO does not have to change the dimensions of its first-phase proposal, because it appears feasible to achieve reductions at the level it has proposed. But it should broaden the scope of that proposal to include early-warning measures, constraints and the reduction of additional force components. And, while giving priority to achieving a first agreement, NATO should expand its overall reduction objective and develop a specific proposal for a second phase of deep cuts.

If the NATO governments do not take the initiative to move to a more ambitious overall approach, the initiative in the new talks will be left to the Soviet Union. If the NATO governments hold back in the CFE talks, the likelihood will also increase that individual NATO countries will act unilaterally to cut NATO budgets. In that event, the build-down of the East-West military confrontation in Europe may well proceed through cuts in NATO forces, but without further, negotiated cuts in Soviet forces or even a commitment by the Soviets not to increase their forces. The possibility of gaining important early-warning and verification measures associated with negotiated reductions

could also be lost. Moreover, while there is room for unilateral Western actions coordinated within NATO, the route of unilateral action by individual NATO states acting on their own will cause internal friction and severely weaken the NATO alliance.

A Different Program

The Warsaw Pact's program of unilateral reduction of forward-deployed armored units and the Pact's readiness in principle to eliminate its large numerical superiorities in tanks, artillery and armored troop carriers evidence a serious Soviet desire to make deep cuts in the East-West military confrontation in Europe. These developments signal an important opportunity for the Bush administration that was not clear when NATO formulated its present reduction approach. The Bush administration now has the possibility to propose something more far-reaching to the NATO allies.

It is unlikely, given the slowness of the NATO decision-making process, that new decisions could be reached within the next few months. But the Bush administration and NATO should start now to rethink their positions. The objective should be to answer within the next months some of the fundamental questions raised by Soviet moves and to put forward a revised NATO position calling for deep cuts in a second phase of reductions and making good the shortcomings in the present NATO program already described.

The basic issue for NATO to decide is whether to move from a position that would simply continue the NATO-Pact confrontation at a high, although more equal level to a position whose objective is to deliberately build down the confrontation. If NATO decides for build-down, as it should, a useful goal for the CFE talks would be to achieve an equal plateau of reduced risks and costs from which the West can observe long-term developments in the Soviet Union. That plateau can be reached by various forms of deep cuts; some possibilities are proposed below.

Interim Measures

Early in the CFE talks, parallel to discussing reductions, NATO should introduce plans for full data exchange, early-warning measures, and agreed restrictions on military deployments. These measures, described below, could go into effect rapidly, creating a structure favoring agreement on negotiated

reductions and demonstrating to Western opinion that something was being achieved in the talks.

Zone of Military Openness

NATO should propose a program to make the entire Atlantic-to-Urals area a "Zone of Military Openness." This program could be negotiated at the outset of the new talks, while the two alliances are discussing Stage One reductions. The combined objective would be to provide both effective early warning and the step-by-step beginnings of a verification system whose first task will be to monitor Soviet and Eastern European unilateral reductions and provide assurance that withdrawn forces do not return. The program for a Zone of Military Openness would include the following steps:

1. Full data exchange, with each side providing the location and strength in men and major armaments of each major ground and air-force unit plus armaments in storage, as of some agreed date like January 1, 1989, together with 100 on-site evaluation/validation inspections annually over a three-year period comparable to the on-site baseline inspections of the INF Treaty. The purpose of the data exchange is not as in MBFR to set reduction levels--that can be done independently of data agreement. It is to get a clearer picture of Soviet and Pact forces at the outset of Soviet and Eastern European unilateral withdrawals, to follow those withdrawals as they take place, to assure against return of withdrawn units, and to introduce verification procedures. The long-term objective is to obtain an accurate, undisputed picture of Warsaw Pact and NATO forces.
2. An agreed quota of at least 150 overflights per year by low-flying aircraft over the Eastern and Western parts of the Atlantic-to-Urals area respectively. These overflights would be backed by a smaller quota of ground inspections, or by teams of roving inspectors, plus small teams of observers at traffic choke points and ground and air-force headquarters at the divisional level. The dual purpose would be verification and early warning, with coverage of Soviet reserves as well as forward deployments.

Restricted Military Area

A second NATO priority should be agreed restrictions on force deploy-

ments, including establishment of a Restricted Military Area along the line of contact between the two alliances in Central Europe, 50 kilometers deep on the NATO side and 100 kilometers deep on the Pact side. The Warsaw Pact has proposed a zone of reduced armaments along the dividing line between the two alliances but it is not asymmetrical in depth. Under the present proposal for a Restricted Military Area, all tanks, artillery, armored troop carriers, armed helicopters, surface-to-surface missiles, and attack aircraft would be excluded from the restricted area, as would major ammunition storage, tank transporters, bridging, and pipeline units. The area would be subject to intense verification. Soviet armaments withdrawn from the area would be removed to the U.S.S.R. and destroyed as part of Gorbachev's program of unilateral Soviet reductions; NATO and Eastern European armaments would remain in Central Europe.

The dual purpose here is to eliminate the residual possibility of surprise attack and to restructure forces of both sides in a defensive mode. Doing this would insulate the area of greatest concentration of opposing forces against the effects of miscalculation or misperception while providing effective defense. Establishing a Restricted Military Area is also a way, if negotiated reductions are long in coming, to convert the announced unilateral reductions of Warsaw Pact forces into an enduring commitment without requiring parallel NATO cuts.

Reductions

As a realistic goal for a ten-year period, we propose a phased, step-by-step 50% reduction in unit form of NATO holdings of the same armaments listed above, and also of NATO active-duty ground and air-force personnel. These reductions would take place during the 1990s with the ultimate objective of deep cuts in annual Western expenditures for European defense by the end of that period. The Warsaw Pact countries would reduce their holdings of the same armaments and of their active-duty ground and air-force personnel in the Atlantic-to-Urals area to the new NATO levels.

While initial reductions 5-10% below NATO levels would be fully acceptable if agreed between East and West, we believe both alliances should be encouraged to think in terms of larger initial cuts and in a broader range of armaments

than NATO is now contemplating. Consequently, we suggest that initially, NATO would cut 20% of its Central European holdings of tanks, artillery, armored troop carriers, armed helicopters, surface-to-surface missiles, and attack aircraft (tactical ground-attack aircraft, fighter-bombers, and medium bombers) and of its active-duty military personnel. The Pact would simultaneously reduce to the new NATO level.

Verification of such reductions would focus more on human observers and inspectors than does verification of nuclear reductions. It would make wide use of secured storage--fenced storage areas with small, permanent observer teams from the opposing alliance observing exits and patrolling the periphery.

The Future of Eastern Europe

Under the impact of the Gorbachev reform movement, the whole of Eastern Europe is today in ferment. Over the next decade, the most likely trigger for war in Europe is widespread, uncontrollable unrest in one or more Eastern European countries similar to the way in which unrest in the Balkans sparked World War I. To be sure, the West has no interest in maintaining the internal status quo in Eastern European countries; rather, it is interested in promoting change in that status quo. But East and West do share a common interest in insuring that the process of continuing change in Eastern Europe does not spill over into East-West conflict.

Arms control agreements are not the problem here--the pressures which could lead to widespread unrest have already been released. But arms control is part of the solution. The entire approach proposed here--early-warning measures, agreed restrictions on force deployments, inspections and the shift of each alliance to a more defensive posture through deep cuts--is designed to prevent a situation where the huge military concentration in Europe is sparked into conflict by misperceptions of military activities during a crisis in Eastern Europe.

An agreement such as we have proposed will provide additional treaty barriers to Soviet intervention. It will also provide for reciprocal restraints on Western military activities, and many possibilities for checking the actual force activities of both sides. This could serve to reduce fears of a nervous Soviet leadership that the NATO alliance was seeking to take military advantage of possible unrest, fears which otherwise might in a crisis lead the Soviets to take preemptive military action. This important function

of a CFE agreement is all the more reason to press for an early first agreement in the talks.

Actions for the Bush Administration

The first priority for the Bush administration regarding forces in Europe is to devise a program which can make a real test of the possibilities in the new Soviet position. To assure effective negotiation of an expanded program, the Bush administration should:

1. Appoint a senior Washington-based official with political standing and assured access to the president to coordinate and expedite the negotiation among Washington agencies and the NATO allies, and to maintain contact with Soviet and Pact leaders. If this is not done, the talks will inevitably lag, no matter how strong top-level interest may be in a positive outcome.
2. Propose reform of NATO, to convert it from a forum where the United States deals with European member states on an individual basis to a forum where the United States deals with a European grouping, plus some individual member states.
3. Join the European nuclear powers, France and Great Britain, in a cooperative arrangement to assure a continuing Western nuclear deterrent vis-a-vis the Soviet Union following the negotiated reduction of NATO and Pact nuclear-capable aircraft, artillery and tactical-range surface-to-surface missiles. Even after the deep cuts of a START agreement, the Soviet Union will remain a nuclear superpower, and there will be a need for a counterbalancing NATO deterrent.

The latter two actions should make it possible to secure the willing cooperation of France and the U.K., who are at present contributing to NATO's restrictive negotiating approach, in adopting a more far-reaching one.

To fill out the longer-term Western approach, the administration should discuss with the allies possibilities for common Western economic policy toward the U.S.S.R. and Eastern Europe.

The administration should also discuss ways to develop the rudimentary institutions of the Conference on Security and Cooperation in Europe (CSCE) into a European security system bridging the two alliances. This would include the establishment of a common NATO-Warsaw Pact center to coordinate further

data exchange, observation, and verification and compliance issues, and to act as a risk-reduction center for low-level incidents involving forces of the two alliances. It could also include the development of this or other CSCE institutions for possible use in fact-finding and mediation in the event of disputes among CSCE members states, for example, between Hungary and Romania over treatment of the Hungarian minority in Romania. In extreme cases of the possible breakdown of public order in an Eastern European state, such a CSCE institution might coordinate the use of forces of neutral CSCE states as peace-keeping forces to avoid intervention by the forces of either alliance.

* * * * * * * * *

CHAPTER I

THE POLITICAL CONTEXT

New NATO-Warsaw Pact force-reduction talks, called Negotiations on Conventional Armed Forces in Europe, or CFE, began in Vienna on March 9 this year--the year the NATO alliance celebrates its 40th anniversary. These talks offer an opportunity to make deep cuts in the size and costs of the NATO-Warsaw Pact military confrontation in Europe.

Will the talks succeed? The NATO-Pact negotiation on Mutual and Balanced Force Reductions (MBFR talks), also based in Vienna, failed after 15 years of effort to make any dent in the NATO-Pact confrontation and were closed down in February 1989. And that confrontation remains very large indeed: seven million soldiers and airmen and 10,000 nuclear warheads even after INF, and combined costs of at least $500 billion a year for both alliances. The concentration of forces in Europe is the largest, the costliest, and potentially the deadliest peacetime military confrontation in human history. The United States spends at least half of its annual $300 billion defense budget for the defense of Europe.

The convergence of two fundamentally important developments--the gradual fading of the political origins of the military confrontation in Europe, and the emergence of a reform leadership in the U.S.S.R.--have created an unprecedented opportunity for a negotiated build-down of the confrontation. Several Soviet actions document a serious intention to build down the confrontation in

Europe. Among them are the conclusion of the INF Treaty, with much larger Soviet than United States reductions and intensive on-site inspection on U.S.S.R. territory, and General Secretary Gorbachev's December 1988 announcement of unilateral Soviet reductions. The latter, if fully implemented, should effectively eliminate the possibility of a successful minimum-preparation attack using forces in place on the vital Central Front in Federal Germany, still NATO's priority concern. The Warsaw Pact's opening proposals at CFE, already described, are further evidence of a Soviet intention to build down the confrontation.

HOW TO DEFINE WESTERN GOALS

Many advocates of a negotiated reduction of the NATO-Pact confrontation--and also many who remain skeptical about the whole enterprise--are calling for clarity as to the end point of the negotiation process in Europe, some vision of a possible final outcome. But there are too many uncertainties in the future, especially as regards the long-term shape of Soviet society now that pent-up forces for change have been released, to predict the internal state and foreign policy of the Soviet Union decades hence or to attempt to define some ultimate military relationship between East and West in Europe. Moreover, if the Western approach is formulated in a way that improves NATO security at each step, final certainty about the future is not needed. Yet the demands of Western publics for some sense of direction in this process are reasonable and must be met.

In the circumstances, it seems wisest to aim for an intermediate goal, somewhere between present force levels and some ultimate relationship of assured peace and stability in Europe. The NATO countries should be looking for a more comfortable, less risky, less costly resting place to observe long-term developments in the Soviet Union: a lower plateau of reduced risks and costs. We define that plateau here as an equal level after a reduction of 50% of NATO's current strength in men and major armaments in the Atlantic-to-Urals area, with Pact forces reducing to the NATO level. This goal is derived from the goal of a 50% reduction in intercontinental missiles being negotiated in the Strategic Arms Reductions Talks (START). Although the circumstances of the

European military confrontation differ from those of the U.S.-Soviet strategic confrontation, the underlying political changes in the Soviet Union that make the START reductions feasible also apply to the NATO-Pact situation in Europe. Further reductions in Europe might follow in the course of time, but only if there were enduring, positive change in the Soviet system and in Soviet actions abroad.

This report, therefore, deals with the possibility of reducing the military confrontation in Europe, not with its elimination, and not with the complete elimination of East-West tension. Consequently, it deals with a world in which the East-West confrontation continues, together with the military alliances that are its manifestation.

It is assumed here that the Gorbachev reform line in the Soviet Union will continue for the next five to six years at least. It is also assumed that if Gorbachev is replaced or slows down domestically, the present reform line and the positive trends in foreign defense and arms control policy will continue, although more cautiously and slowly, because the basic economic needs that drive them will continue.

Nevertheless, the Soviet situation is so volatile that seizure of power by a group intent on reversion to confrontation and expansion cannot be excluded. If this drastic change occurs, the present openness of Soviet society and the myriad personal contacts with people in the West that have accompanied it would give very clear political warning of the pending charge. In any event, the Western allies should devise steps of force reduction and early warning such that, even if the Soviets revert to a more negative policy, the NATO countries will be better off militarily at each step than they would be with today's situation.

The Gorbachev reform movement in the U.S.S.R. has mainly domestic causes. But it also results in large part from the success of the Western containment policy. After 40 years of arduous Western effort, the Soviet leadership--whose actions were the main cause of the East-West confrontation--is finally turning inward for reform of an ineffective system. Meanwhile, too, the political causes of the Cold War military confrontation in Europe have ebbed away: NATO's early fears of a combined operation between the Red Army and the

then-strong European Communist parties to seize Western Europe and early Pact fears of an irredentist Germany backed by American arms.

But the price of this success has also been high for the United States: two wars, in Korea and Vietnam, with high cost in life, money, and political unity; a foreign policy, domestic economy, and research establishment dominated by military considerations; a dangerously large stock of nuclear weapons built at serious environmental cost; and a country that has spent itself into an enormous national debt.

It is time to realize that we have achieved considerable success and that we can afford to cut back on this heavy investment. Therefore, beyond reducing the risks of conflict in Europe, a second major aim of the deep cuts should be to achieve real savings in the $300 billion that NATO member-states collectively pay for the defense of Europe. This would include, of course, major savings in United States expenditures for European defense.

These United States savings will be realized more gradually than those of European allies because so much of American expenditure for defense in Europe is tied in with maintaining forces in the United States to reinforce American forces in Europe in the event of conflict. But it should be possible within the 10-year period to achieve annual direct savings of $25-$30 billion in the U.S. defense budget, with more to come if the U.S. succeeds in achieving workable understandings with the Soviets over mutual restraint in Third World countries. The European allies would be achieving larger direct savings than the United States from their reductions because they maintain a much higher share of NATO forces in Europe. In those circumstances, they should be more willing than in current disputes over burden-sharing to pass on some of these savings to the United States in the form of troop support and infrastructure payments. An estimate of possible savings from the force reductions described in this report has been made by the Washington-based Defense Budget Project and is contained in the annex of this report.

Achieving success in the new CFE talks will be only one part of a broader task of the Bush administration and its successors. The main task of United States administrations in securing the peace over the next decade is to consolidate the trend toward build-down of the U.S.-Soviet military confrontation on a worldwide basis.

Effective defenses will continue to be necessary for the United States. But the administration should take the lead in moving away from a post-World War II international system that has been dominated by military considerations, especially by nuclear weapons, toward a global system in which political and economic factors play a greater role, and where creative human and material resources are released from military purposes for other needs, both inside the United States and in other countries. Here again, we are not seeking the ideal, but a global system in which mutual restraint in military forces is combined with a degree of cooperation in damping down regional conflicts and in managing an increasingly stressed natural environment.

SHOULD THE WEST WAIT FOR MORE CERTAINTY ABOUT THE SOVIET UNION?

The task of making deep force cuts in Europe is enormously difficult. The East-West military confrontation there has lasted for over 40 years and has deep political, psychological, and economic roots--and entrenched vested interests--on both sides. Many serious-minded people in the West--and probably in the East as well--tacitly consider the continuation of this complex system of military stalemate as the only effective guarantor of peace and stability in Europe. They fear that tampering with it may bring instability and even trigger conflict. If the system works, they argue, don't change it.

The worries of the skeptics could prove founded. Some forms of troop reduction could increase instability and the incentives for preemptive attack in a crisis. In the worst case, negotiated force reductions could elicit uncontrollable political trends leading to wholesale American troop withdrawal from Europe, to the stripping away of Europe's remaining American, British, and French nuclear deterrent forces, to West German neutrality, and to the dissolution of the Western military coalition. They could also lead to lasting intimidation of Western Europe by the Soviet Union, which will remain a military superpower even with deep cuts in its strategic nuclear and conventional forces. It is also possible that widespread instability in Eastern Europe could result in East-West conflict. In light of these possibilities, some critics argue that it would be better for the West to wait, to keep up its defenses, and to observe whether in fact the Soviet Union ultimately moves to

an enduring pattern of pluralism. Only then, it is argued, should NATO agree to reduce its forces.

There is a lot at stake here. All Western governments must take fully into account the inevitable uncertainty of the future of the Soviet Union and the worries connected with this uncertainty, which are held by some of the most highly qualified military and political leaders of the Western coalition.

But we have been through this debate before. The underlying question of principle has already been settled in even more uncertain and negative circumstances than those of today, where the basic issue is how long a clearly favorable trend in the U.S.S.R. will continue. In the early 1960s, with the conclusion of the Partial Test Ban Treaty, the countries of the Western coalition reached the decision that it was unnecessary and undesirable to await possible transformation of the Soviet system before entering arms control agreements with the U.S.S.R.. Correctly, they considered that concluding agreements with the U.S.S.R. and its allies could benefit Western security while promoting the internal evolution in the U.S.S.R. and Eastern Europe that they desired; blocking off the possibility of agreements could have negative effects on that evolution.

Moreover, Western waiting and inaction is the wrong way to deal with uncertainties about the durability of Gorbachev's reform movement. The best insurance the West can take out against possible future Soviet reversion to a more aggressive policy is to take advantage now of the flexibility of the Gorbachev leadership to make deep agreed cuts in Soviet forces, combined with a network of inspection and observation measures. A major objective of Western arms control activities should be to impose a very long delay before even a more aggressive Soviet leadership could feel confident about having a sufficient edge over NATO's remaining forces--including NATO reserves--to consider an attack.

Western failure to respond to Soviet proposals for asymmetrical force cuts in Europe in favor of proceeding with competition between the alliances could have negative effects on internal developments in the U.S.S.R. The effect would be to discredit the Soviet leadership, which is actively pushing arms control with the West as part of its overall program. We may be skeptical that Western actions can affect the reform process inside the Soviet system.

But in agreeing on well-designed measures of arms control with the Soviet Union and its allies, we are abetting the reform process while gaining a clear benefit for ourselves.

THE COSTS OF NATO INACTION

Quite deliberately, we have been at pains here to list the possible negative developments that could accompany the new CFE talks. On the other hand, the risks and costs in continuing the status quo in Europe are also high: the threat of nuclear retaliation around which the defenses of both alliances are in essence organized is a very high-risk way of deterring war. If it fails, as all forms of deterrence have failed in previous wars, the result will be general catastrophe.

Moreover, the military confrontation in Europe is not static, but dynamic. The next wave of competitive force improvement will see the deployment by both alliances of perhaps several thousand conventionally armed surface-to-surface missiles with ranges up to 500 kilometers. Because the best targets of these weapons are the missile sites, airfields, ports, rail junctions, and field headquarters of the opposing alliance, there will be high incentive to use them preemptively in crisis situations--without the inhibitions of using nuclear weapons. The NATO-Pact confrontation will become more unstable.

The entire thrust of Soviet policy on European force reductions: the cooperative Soviet behavior in the Stockholm Conference on Confidence- and Security-building Measures; the Soviet acceptance at the May, 1988 Moscow summit of the West's reduction concept of reducing to equality below the level of the numerically weaker side; the Soviet announcement of unilateral reductions in December, 1988; and the March, 1989 Soviet CFE proposals themselves, as well as the main trend of defense discussion in the Soviet Union itself--appears to indicate that the Soviet leadership has decided to make a radical cut of forty to fifty percent or more in Soviet forces in Europe and possibly in its strategic nuclear forces as well--regardless of what NATO does in return.

If this assessment is correct, it means that the Soviet leadership may not wait much beyond the two-year period of implementation in 1989 and 1990 of the already announced unilateral reductions to see whether the CFE talks may lead to a first agreement within one or two years thereafter. If the Soviet

leadership decides that the CFE talks are not productive, it seems likely to decide on a further large unilateral cut in Soviet forces.

If this is the likely outcome, why should NATO bother to undertake the difficult effort of negotiating reductions? There are several important reasons for doing so. All of them have to do with reducing the uncertainties about the Soviet future which must be a central issue when considering reduction of Western forces:

1. A negotiated outcome will provide greater insurance--in the form of commitments not to exceed residual levels, early-warning and verification measures, changes in force structure, and constraints on force activities--against recurrence of a negative Soviet policy.
2. A negotiated outcome would probably bring larger Soviet reductions than unilateral reductions, a further obstacle to reversion to an expansionist policy.
3. We have already identified widespread unrest in Eastern Europe followed by misperception and misunderstanding of military activities of the opposing alliances as the most likely trigger of war in Europe if it comes. As mentioned, a functioning force reduction agreement would provide valuable, perhaps crucial safeguards against this contingency.
4. NATO will maintain its unity and cohesion better under the discipline of conducting negotiations--difficult as it is to do so--than in the more erosive situation of competitive individual force cuts.
5. A negotiated outcome would provide a stronger endorsement and confirmation within the Soviet system of the correctness of the Gorbachev line than a series of unilateral cuts. Like Western publics, the Soviet public--and the Soviet military--like to see their country get something in return for its actions.

Taken together, these factors provide far more assurance than unilateral action of continuation of a constructive Soviet approach and more protection against reversion to a negative one.

There is a role for deliberate unilateral measures, coordinated within the NATO alliance, in reducing the East-West confrontation. But unilateral reductions by individual alliance members acting on their own under domestic pressure are a different matter. On the one hand, they would cause the West

to forego the benefits of additional Warsaw Pact cuts and of the contractual ceilings, early-warning measures, and stringent verification that would make Pact reductions enduring. Even more important, unilateral reductions can bring friction and disunity within and among member states, with high cost to overall NATO effectiveness.

These pressures could produce a weaker NATO, with a splintered U.S.-European relationship, rather than the evolving but still strong transatlantic link we should be seeking. Ultimately, trends like these could create the kind of weak and flabby Western Europe vulnerable to Soviet influence that is so much feared by the critics of negotiation. This outcome can be avoided and alliance unity maintained by the route of negotiation--but only if the negotiating is undertaken vigorously and with a purpose.

Many European and American conservatives, with traditional distrust for the judgment of the masses, regard Western European public opinion, especially Federal German opinion, as inert clay that the Gorbachev leadership can manipulate to influence Western governments in the direction of unilateral disarmament. The conservatives are wrong on this. Public opinion is far from infallible. Nevertheless, after watching the postwar Communist takeover of Eastern Europe and the Korean War, the Western European public showed considerable common sense in accepting that there was also a threat of Communist takeover of Western Europe and in patiently approving large defense budgets for 40 years. But European opinion also showed common sense in realizing by the early 1970s that the Cold War in Europe had passed its peak and was on the downgrade. More recently, the public has recognized that Gorbachev's proposals for cutting back the confrontation in Europe should be tested thoroughly and investigated to see whether they can be put into effect.

Whether they share the pessimistic or the optimistic view on force reductions in Europe, Western political leaders must acknowledge that these two conflicting views are a fact of political life and seek to reconcile them. In doing so, they have to recognize that the optimistic view characterizes by far the greatest majority of their publics, especially in Western Europe, while the pessimists are generally more influential as individuals. This means that if the NATO coalition negotiates only in the formal sense, without real effort to achieve results, governments will have to reckon with mounting public

pressure for concessions to Soviet negotiating positions, for unilateral force cuts, and for cuts in defense budgets. Western leaders can instead deflect these public-opinion pressures back to the Soviets and meet the demands of conservative opinion at the same time by taking the lead in devising reduction approaches that are more radical than NATO's current approach.

The task is complex, but not intractable. Present trends in East-West relations are favorable; the East-West political confrontation in Europe has peaked and is on the wane. The downward movement is not easily reversible. Sooner or later, by one means or another, it will encompass the NATO-Warsaw Pact deadlock. Our choice, therefore, is not over the general trend, but over its articulation in specific actions and approaches.

CHAPTER II

WEAKNESSES OF THE CURRENT NATO APPROACH

THE SOVIET POSITION

With its acceptance of Pact reductions far larger than NATO ones and of intrusive verification provisions, the Soviet position at the CFE talks has come a long way since Gorbachev first proposed the idea in April 1986. At the outset, Gorbachev unilaterally conceded the inclusion of Soviet territory eastward to the Urals in the reduction area to be covered by the new talks. At the 1988 Moscow summit, the Soviet leadership moved to adopt the basic NATO negotiating approach in the earlier MBFR talks--reductions to parity at a level below that of the numerically weaker side. Soviet officials also offered to exchange detailed data on the strength and location of individual units, together with on-site inspection in the event of disputes, making good, at least on paper, their uncooperative position on data in the MBFR talks.

Soviet negotiators at the Conference for Security and Cooperation in Europe review conference in Vienna (November, 1986 to January, 1989) accepted NATO's draft as the main basis of the common mandate or terms of reference for the new CFE talks. The agreed mandate includes NATO's major concepts of reducing the possibility of surprise attack and eliminating the capacity for large-scale offensives. Soviet negotiators showed further flexibility in the face of NATO opposition by dropping their demands for explicit coverage of

nuclear weapons, of aircraft capable of delivering nuclear arms, and of naval forces.

Some of the remaining Western doubts about Soviet seriousness in the new CFE talks were met by General Secretary Gorbachev's announcement on December 7, 1988, of large unilateral reductions of Soviet forces. Given that the motivations behind these reductions were at least in part to save money and to impress Western public opinion that real change has taken place in Soviet foreign policy, these reductions are likely to be implemented in full; to do otherwise would be counter-productive. When implemented, they will be significant. They include the withdrawal and disbandment over a two-year period of six Soviet tank divisions with about 2,000 tanks (four divisions from East Germany, the area of most concern to the West, and one each from Czechoslovakia and Hungary) and the dismantling of these tanks, plus the withdrawal of 3,000 more tanks (the tank holdings of 10 additional Soviet tank divisions) from these countries. Withdrawal of these 3,000 tanks will be taken by thinning out the remaining 24 Soviet divisions in the three countries and lead to the restructuring of these divisions in a more defensive mode.

Implementation of the Soviet withdrawals and of the unilateral reductions subsequently announced by Eastern European members of the Warsaw Pact should substantially reduce Western fears of a short-preparation surprise attack on NATO's Central Front using forces in place. Up to now, this has been the contingency which worries NATO leaders the most.

Aware of considerable disarray in NATO preparations for the CFE talks, the Soviet leadership seems in its announcement of unilateral reductions to have decided not to make the economic and political benefits of force reductions dependent on early progress in the negotiations. However, in its proposals at the outset of the CFE talks (reviewed in the Summary of this report) the Pact gave conclusive evidence of its interest in making still more extensive, negotiated cuts in their forces.

THE NATO APPROACH AND ITS WEAKNESSES

In its position paper of March 6, 1989, the NATO countries presented the general approach they will follow in the CFE talks.

NATO is proposing an overall reduction of main battle tanks, artillery, and armored troop carriers of both alliances to a level about 5-10% below NATO's current holding of these armaments. NATO does not now propose to reduce aircraft or surface-to-surface missiles, whose reduction has been proposed by the Pact.

In the entire Atlantic-to-Urals area, NATO is proposing reduction to equal ceilings between the two alliances of 20,000 in main battle tanks; 16,500 in artillery and 28,000 in armored troop carriers, with armored infantry fighting vehicles constituting no more than 12,000 of the 28,000 total.

NATO is also proposing equal ceilings in these armaments between the two alliances in four separate sub-regions of decreasing size, the fourth and smallest being the Central European region used in the MBFR talks. The main purpose of these sub-regions or geographic sub-limits is to focus reductions on the areas of greatest force concentration and to prevent the Soviet Union from taking the bulk of its reductions in reserve forces, leaving forward deployed ready forces relatively untouched.

In addition to the overall Atlantic-to-Urals limit and the three sub-regions, NATO proposes a fifth sub-limitation, a "sufficiency limit", whereby no single country in either alliance can have more than 60% of alliance holdings of the three weapons. (Formally, the requirement is expressed as a limit for any single country of 30% of the combined total holdings of both alliances; the specific limits suggested are 12,000 tanks; 10,000 artillery pieces; 16,800 troop carriers.) The purpose of this restriction is to put a ceiling on the Soviet Union's portion of the total number of restricted armaments permitted to the Warsaw Pact following reductions.

The sixth sub-limit proposed by NATO is on the armaments of "stationed forces", armaments deployed by members of one alliance on the territories of other members states of the alliance. The proposed limits are: tanks, 3,200; artillery, 1,700; and armored troop carriers, 6,000. The purpose of this limitation is to hold down Soviet deployments in Eastern Europe. The level of tanks permitted Soviet forces, in terms of the current average tank holdings of Soviet divisions, would be ten divisions, as contrasted with the thirty Soviet divisions now deployed in Czechoslovakia, East Germany, Poland and Hungary (although perhaps up to fifteen divisions following restructuring under the

lower tank holdings of divisions which will result from Soviet unilateral withdrawals).

Sub-limits can be useful. However, some of NATO's geographic sub-limits are unnecessary and gerrymandered to meet political conceptions of individual NATO members. The Pact will have its own ideas on how to divide up the reduction area and there may be extensive dispute over this topic.

But the real negotiating difficulties are likely to come with the fifth and sixth sub-limits described above--the "sufficiency" and stationed forces limits which, in effect, place a separate national sub-limit on Soviet forces, while NATO claims for itself alliance-wide collective ceilings with no ceilings on the forces of any member state, and with each alliance deciding for itself internally the allocation of reductions.

There are good reasons for suggesting these ceilings on Soviet forces, but they may be hard to achieve politically. A possible compromise might be to revise the sufficiency limit to provide that no two members of an alliance together could have more than 65% of total specified armaments of their alliance. With the Soviet Union followed by Czechoslovakia having the largest tank holdings of the Warsaw Pact, this limit would still hold the Soviet Union to 60% of the Pact total, while the two largest forces in NATO as regards amount of equipment, the F.R.G. and the U.S. (when stored tanks are counted in), would have only something over 50% of NATO tanks.

NATO ultimately intends to propose stabilizing measures for this negotiation, but to place primary data exchange and most confidence-building measures in the second phase of the Conference on Confidence- and Security-Building Measures and Disarmament in Europe, which is taking place parallel to the CFE talks. This conference, too, is taking place in Vienna, with participation by all members of NATO and the Pact as well as the 12 neutral and nonaligned states that signed the 1975 Helsinki accords.

NATO's negotiating approach for the CFE talks is a compromise among widely divergent views of member-states. NATO's proposals for elimination of the Pact's large superiority in tanks, artillery and armored troop carriers by reducing to a new equal level slightly below NATO's present holdings is a highly desirable first step and, subject to some amendments, merits full support. But the NATO position fails to provide for a real build-down of the

East-West military confrontation in Europe going beyond the initial 5-10% cuts of its own forces NATO is proposing.

The argument of the NATO states that they can afford only a minimal cut of their own armaments and still maintain the necessary force-to-space ratio in its Forward Defense Strategy applies traditional thinking to a changed situation. NATO calculates that if the number of its divisions on the borders with East Germany and Czechoslovakia were decreased, there would be too few NATO divisions to cover the whole line, using a rule of thumb that maximum coverage of the line by a single division is about thirty kilometers. This argument ignores the possibility of restructuring NATO forces in response to deep Pact cuts while maintaining forward defense and the forward presence of the allies now in Germany.

The NATO position provides for Pact reductions far larger than those of NATO. If applied to the NATO-Pact tank balance, the NATO reduction approach would result in a reduction of about 2,000 NATO tanks to 27,000 Pact tanks, even after 10,000 unilateral Soviet reductions. The Pact would be expected to agree to this entire reduction in signing a first agreement, though implementation would extend over a period of years. The Warsaw Pact position presented by Soviet Foreign Minister Shevardnadze in his speech at the opening of the CFE talks, to which we have already referred, was prepared in knowledge of the main points of the NATO proposal. Foreign Minister Shevardnadze indicated that the Pact would be prepared to make reductions of tanks, artillery and armored troop carriers to a new level 10-15% below that of the weaker side, which the Pact admits in its own published data is NATO. This Pact reduction proposal is a remarkable concession at the outset of the CFE talks.

NATO's current reluctance or refusal to reduce the attack aircraft, armed helicopters, surface-to-surface missiles, and military manpower whose reduction has also been proposed by the Pact has a complex background. Yet from the viewpoint of reductions with maximum benefit for NATO's security, the situation appears more straightforward. The Pact has a large preponderance in overall numbers of combat aircraft, helicopters, and surface-to-surface missiles that can be used with conventional as well as nuclear warheads. NATO believes that, if war comes in Europe, the Pact will start it. Massive Pact air and conventionally-armed missile attack on NATO's air assets, command-and-control, and

prepositioned arms stocks at the outset of a conflict could have decisive effect on the outcome.

Therefore, it makes sense to seek to eliminate the Pact's numerical advantage in these weapons too--in numbers of tactical surface-to-surface missiles, it is 10:1. Against this background, NATO's opposition to reduction of these armaments seems myopic, however understandable its source in worries over the INF agreement and the future of NATO nuclear deterrence. For NATO, coping with the dispute among its members over further nuclear reductions seems to be taking priority over its mission to reduce the possibility of successful Pact attack.

Moreover, as we have pointed out in the summary of this report, the NATO approach has several other military shortcomings: (1) it presently contains no proposals for early warning measures which could give participants greater security from the outset of negotiations which could be long in reaching an agreement on reductions; (2) it does not now provide for constraints or negotiated restrictions on forward deployment of especially threatening Pact armaments, munitions, or equipment, like tank transporters, vital for sustaining forward attack; the proposed restriction on stationed forces and even the smallest sub-region proposed by NATO cover a large territory of Eastern Europe and do not provide this type of constraint; (3) it contains no provision for residual ceilings on units of the type reduced, leaving the road open for the Pact to establish more new tank units with a smaller number of tanks but more supporting arms and infantry; (4) it contains no provision for manpower ceilings or manpower reductions, with the negative result that the Pact could increase the manpower of front-line combat forces; (5) it contains no provision for control of production of reduced armaments like tanks and artillery in the reduction area. Continued Soviet tank and artillery production could negate the purpose of reduction unless controlled in some way; and (6) it contains no proposal for early detailed data exchange in the CFE talks which could help NATO countries monitor unilateral Pact reductions, provide assurance against their return, and to begin to establish a verification regime; data exchange is pushed off into less operational consideration in the CDE talks or limited to exchange on the three armaments NATO proposes for reduction.

And the NATO approach would do little to reduce the costs of the NATO-

Pact confrontation. Such an outcome is wholly inadequate in the face of the need to reduce costs and the possibility of doing so. In some respects, NATO seems to be following the pattern of many aging institutions, where maintaining established procedures takes precedence over exploring new opportunities.

NATO's position represents a lowest common denominator of widely divided national opinion; the Reagan administration, preoccupied by the START talks in its final year of office, was unable to supply much initiative and focused on mediating differences among the other allies.

The Bush administration will have to take a more energetic approach if it wishes results from the new talks. Although it endorsed the NATO position before it was presented in Vienna, the Bush administration did not participate in preparing it. Consequently, it will have a relatively free hand to take the lead in convincing NATO to adopt a more ambitious position. NATO should take Gorbachev's announcement of unilateral reductions and the Pact stated willingness to eliminate its large numerical superiority in tanks, artillery and armored troop carriers as a signal for fundamentally revising its own reduction approach and developing it into something more far-reaching. Given the slowness and difficulty of NATO coordination, this process will take some time. But, within the coming months, the NATO countries should revise their approach and present a NATO proposal for a second phase of reductions which would give some perspective and aim to the reduction process now that the Soviets appear ready to eliminate their large numerical superiority in tanks and artillery.

NATO should set as a general goal for the new CFE talks a deliberate build-down of the East-West military confrontation in Europe, reducing its risks and its costs through deep cuts, aiming for a low, equal plateau, a position where the West could rest more comfortably, with less strain and apprehension, while it observes long-term developments in the Soviet Union.

CHAPTER III

INTERIM MEASURES

EARLY-WARNING AND VERIFICATION MEASURES

The first steps toward reaching this goal should focus on transparency and early-warning measures which are missing from NATO's current proposals.

The two alliances should seek to agree on interim measures of this kind early in the new talks.

NATO should begin by presenting the following proposals in Vienna: (1) the establishment of a regime of data exchange, on-site inspection, and overflights that would make the entire Atlantic-to-Urals area a Zone of Military Openness; and (2) the establishment along the Federal German border with East Germany and Czechoslovakia of a Restricted Military Area from which armaments indispensable for attack would be excluded. Establishment of the Restricted Military Area would make permanent the effects of announced Soviet unilateral reductions. It would further reduce the possibility of a successful Pact attack with minimum preparation using forces in place, while maintaining NATO forward defense in a way that would permit deep cuts in NATO forces. Taken together, agreement on these two measures and their successful implementation would provide sufficient confidence about the status and activities of Soviet active-duty and mobilization forces to enable NATO member states to take a more positive view of deep cuts in NATO and Pact forces.

ZONE OF MILITARY OPENNESS

The program for making the Atlantic-to-Urals area a Zone of Military Openness would consist of mutually reinforcing data exchange, data evaluation inspections, and early-warning measures.

Initial data exchange would consist of the location, designation, and strength in men and major armaments as of some agreed date, like January 1, 1989, of all active-duty and reserve units of both alliances in the Atlantic-to-Urals area down to the level of brigade or regiment in ground forces and of comparable air-force units. The exchange should cover weapons in storage, repair, and transit. After clarifying discussion, this exchange would be backed by a three-year program of 100 on-site inspections per year for data evaluation, comparable but not identical to the 130 baseline inspections under the INF treaty. Inspections would be on short-notice, of division-sized units or smaller, with the units designated by the inspecting side. As soon as the inspection is notified, military movements in the selected unit and surrounding area would be prohibited, and the area would be under surveillance of satellites and low-flying aircraft.

This program would have a threefold purpose: to help NATO monitor the course of announced Soviet and Eastern European unilateral reductions and to assure against return of withdrawn or demobilized units; to help each alliance move toward a more precise understanding of the other's forces; and to begin from the outset of the talks to institute procedures for a verification mission that will be considerably more complicated than in INF or even START.

The Warsaw Pact offered in its position paper of July, 1988, to begin the CFE talks with detailed exchange of data and on-site inspection to resolve disputes, but NATO does not now plan to respond affirmatively with a general exchange of data on the forces of each alliance. NATO fears a repetition of the MBFR negotiations, which bogged down over data issues, but it does not appear to appreciate the extent of changes in the Soviet position from earlier MBFR experience: the Soviets are prepared for both the detailed exchange and on-site inspection that they declined in MBFR. And both alliances now realize that full advance agreement on figures, down to the individual soldier and vehicle, is not necessary to set a level to which both sides can reduce. There is no need to repeat the MBFR data experience. But there is a practical and political need to take advantage of the Pact's new willingness to exchange detailed data.

OVERFLIGHTS

The second major component of the Zone of Military Openness would be an annual quota for each alliance of 150 short-notice, low-flying overflights by fixed-wing aircraft or helicopters over the Atlantic-to-Urals area, with up to 10 overflights conducted simultaneously to check on widely spread activities. This system of overflights would give NATO rapid coverage of Pact military activities back to the Urals in an area where satellite photography is often blocked by clouds. In particular, it could help check on unilateral Pact reductions, assure that withdrawn Pact units did not return, and, in the data-validation inspections, assure that elements of inspected garrisons were not being dispersed into surrounding areas. It would provide coverage of the activity of Soviet reserve units as well as of forward-deployed units.

This system of overflights could be supplemented by a limited number of mobile ground observers and by permanent observer teams at main traffic points

and unit headquarters, which could provide information valuable both for early warning and verification, and at a restricted number of exit/entry points, through which forces and major armaments entering or leaving the area would be required to pass. At the moment, NATO does not appear ready to embrace these kinds of early-warning measures.

RESTRICTED MILITARY AREA

Perhaps the most useful of constraint measures would be the creation of a Restricted Military Area (RMA) in Central Europe. The main purpose of an RMA would be to provide for greater stability, reducing the capability for surprise attack by disengaging NATO and Warsaw Pact units most valuable for offense while strengthening each side's capacity for effective defense. It is thus a device for restructuring the confronting alliances at their line of contact. It is also a means of converting the announced Warsaw Pact unilateral reductions into an enduring commitment without requiring parallel cuts by NATO countries. The Warsaw Pact has proposed a zone of reduced armaments along the dividing line between the alliances in Germany. No details of the Pact proposal have as yet been made public--so we present our own version of a Restricted Military Area (RMA).

Under the RMA concept, all NATO and Pact units equipped with surface-to-surface missiles, fixed-wing aircraft, helicopters, tanks, infantry-fighting vehicles (but not necessarily all armored personnel carriers), airborne units, and artillery, with the exception of rockets of 50-kilometer range or less, would be drawn back from the line of confrontation in Federal Germany a distance of 50 kilometers on the NATO side and 100 kilometers on the Warsaw Pact side. Withdrawals would normally be in the form of battalions, units that are usually equipped with a single major armament. Major ammunition depots, bridging, tank transporter, and pipeline units would be included in the withdrawals.

The greater depth of the Pact portion of the area is justified by the relative proximity and relative distance from the dividing line of the two main reinforcing powers of the two alliances, the U.S. and the U.S.S.R., and by the shallowness of the NATO area, even when French territory is included, as compared with the depth of the Warsaw Pact territory to the Urals.

To leave the Restricted Military Area without manpower limits could create the possibility of a forward buildup of Pact infantry units, which might be used for attack. The most practical solution might be to freeze the level of active duty military personnel in the Eastern and Western segments of the RMA at 85,000 for NATO (the present level) and at about 120,000 for the Pact (its present level of 190,000, minus 50,000 Soviet unilateral withdrawals and at least 10,000 each for East German and Czechoslovakian forces).

In the RMA, each alliance would be free to have units of any type other than those equipped with restricted armaments--for example, it could have anti-aircraft, antitank, infantry, and combat-engineer units--and to establish obstacles, barriers, and other counter-mobility measures. On its side, NATO would maintain existing corps sectors, including all those now manned by NATO allies of the Federal Republic. Both the Bundeswehr and allied forces would restructure their ground forces for the forward area in the 50-kilometer zone, and increase infantry, combat engineers, and other permitted forces. Therefore, establishing an RMA would continue forward deployment of allied forces and its associated deterrent effect through assuring the certainty of allied involvement--including the U.S. and U.K.--from the outset of conflict in Central Europe.

The Restricted Military Area would be verified by low-flying aircraft by mobile inspectors inside the area, and by permanent exit/entry posts on its Western and Eastern margins, through which all forces entering or leaving the RMA would be obligated to pass. Major violation of a Restricted Military Area would be considered tantamount to opening hostilities, a point which could be made explicit in the text of the agreement establishing the RMA. Training areas of both alliances located in the area could continue to be used, subject to prenotification, use of exit/entry points, and invitation of observers.

A Restricted Military Area would have many benefits for NATO, but also many for the Pact: It would result in deployment by NATO of a screening force of infantry and obstacles and barriers to take the first impact of possible attack, shifting NATO's scarce armored formations to a more effective role as rapid-response operational reserves, of which NATO now has too few. Major violation of the area by Pact forces would give unambiguous warning, which, by their participation in the agreement, NATO members would be committed in advance to recognize as a casus belli.

NATO should receive immediate warning of Pact preparation for attack outside the RMA through the low-flying overflights and other measures comprising the Zone of Military Openness, as well as from its own intelligence sources. Information on violation of the RMA from NATO's own observers would be immediate and conclusive. In the event of violation, Pact tanks from outside the RMA might be able to cross the 100-kilometer tank-free belt in about two days under interdicting air attack. However, the gain in time to prepare for the armored attack could be vital for NATO. Moreover, the main thrust of Pact attack would be more clear than at present, where Pact armor can probe all along NATO's line. NATO could act to interdict the advancing forces, and could also position its own armored forces more effectively to counter the actual main direction of attack. Fewer of NATO's armored forces would be tacked down along a defensive line awaiting an attack that might never come in their sector. In effect, the RMA would move NATO's defensive frontier 100 kilometers to the East. NATO defense would in many respects gain the depth it now lacks.

Verification of the Restricted Military Area would be relatively easy. As in INF, the total prohibition of the designated armaments would greatly facilitate verification. A manpower ceiling would present verification difficulties, but these should not be insoluble in an area of this limited size. The RMA also has negotiating advantages: the need for agreement on negotiating terms, such as the number of Pact tanks to be reduced in return for each NATO tank, would be obviated. All tanks would go, regardless of their type, quality, or age.

The two alliances could be given a choice between withdrawing prohibited armaments from the RMA in the form of battalions equipped with those weapons and replacing the withdrawn units with units of permitted type; or withdrawing only armaments and leaving the units which held them in the RMA but converting them to units of permitted type. If NATO elected battalion withdrawals, this would mean pullback of about 64 battalions equipped with about 1,700 tanks and 400 artillery pieces (about 14 U.S. tank and artillery battalions and about 50 Federal German tank and artillery battalions). As far as is known, NATO does

not station aircraft, armed helicopters, or surface-to-surface units in the suggested 50-kilometer belt. If infantry-fighting vehicles are withdrawn from the RMA in addition to other armaments listed above--there is a good case for doing so--then the battalions holding them would not be withdrawn, but would remain in place; withdrawal in this case would take out too many infantry units that should stay in the area.

From its 100-kilometer zone, the Pact would have to withdraw components equipped with prohibited weapons. These would include tanks, artillery, and, in the Pact's case, also surface-to-surface missile, armed helicopter, airborne, and bridging units from three East German, four Czechoslovak, and eleven Soviet divisions, totaling about 5,700 tanks, 4,200 artillery pieces, 108 missile launchers, and 300 attack helicopters.

For NATO, the 50-kilometer belt would not require major relocation of its units or construction of new facilities. Tank and artillery battalions could be rotated out of the RMA into installations in other parts of the Federal Republic, and infantry and combat-engineer units rotated into the RMA from units already stationed in the F.R.G. or near it. Because Pact withdrawals would be much larger, the Pact would be able to follow the same procedure only to some degree and would in any event have to restructure remaining forces into infantry units.

As regards disposal of withdrawn Pact armaments, we are assuming that the Soviet share of tanks withdrawn from the RMA, about 60% of the 5,700 total, or roughly 3,400 tanks, as well as the Soviet share of withdrawn artillery pieces, would be included in Soviet unilateral withdrawals from Eastern Europe and taken back to Soviet territory, where a large portion might be dismantled or converted to civilian use. The East German and Czechoslovakian armaments would be destroyed, converted, or stored outside the RMA. Establishment of a Restricted Military Area would provide a contractual barrier against return or reestablishment of these unilaterally withdrawn Pact forces, thus converting a reversible unilateral action into a treaty obligation.

CHAPTER IV

INITIAL REDUCTIONS

To meet the requirement for a reduction approach that can bring deep cuts and real savings, we propose a phased, step-by-step 50% reduction in unit form of NATO holdings of the same armaments as those withdrawn from the Restricted Military Area. In addition, NATO would reduce active-duty ground and air-force personnel by the same amount over a 10-year period in the 1990s, with the objective of substantial cuts in Western budgets for European defense by the end of that period. The Warsaw Pact forces would reduce their holdings of the same armaments and of their active-duty ground and air force personnel in the Atlantic-to-Urals area to the new NATO levels. The Pact's starting point for reductions would be its force levels following implementation of the unilateral Soviet reductions announced by General Secretary Gorbachev in December 1988 and of accompanying Eastern European unilateral reductions.

The overall reductions which would result from applying the opening positions of both sides are shown in the annex. Here, we illustrate the reduction process for the Atlantic-to-Urals area by using as a model a proposal for reductions in Central Europe, the area of greatest NATO-Warsaw Pact force concentration, and the area of greatest United States and Soviet force presence. The process in Central Europe would be replicated in the other sub-regions into which the Atlantic-to-Urals area would be divided by East/West agreement.

The initial Central European reduction would be a cut of 20% in NATO holdings of six key armaments with the greatest invasion or offensive capability, the capacity for attack by seizing and holding foreign territory or for preparing the way for such seizure. Combining the armament reduction proposals made by NATO with those made by the Pact, these armaments are surface-to-surface missiles; ground-attack aircraft; armed helicopters; artillery; tanks; and infantry-fighting vehicles. The Warsaw Pact would reduce its holdings of the same armaments and of the units equipped with them to the level of NATO after a 20% reduction. (Reduction amounts are shown in the annex.)

In this approach, we are suggesting a 20% cut for the first phase. This reduction figure is illustrative; we want to make the point that NATO should be thinking throughout the reduction process of bigger cuts than it now projects. NATO is currently talking about new levels at 5-10% below its present holdings; the Pact has proposed new, first-stage levels 10-15% below the numerically weaker side (in practice, nearly always NATO). In the long run, some compromise figure between NATO and Pact percentages seems probable and should be acceptable as a first stage, provided there is a clear commitment to further reductions.

In later phases of the reduction approach suggested here, both alliances would reduce their holdings of the same armaments both in Central Europe and in the remaining Atlantic-to-Urals area, so that the ultimate outcome would be equal levels of these armaments for both alliances at 50% of NATO's current holdings. Completion of a 50% manpower reduction would follow.

In the early phases of these reductions there would be no limit on the alliances' defensive deployments: anti-aircraft and anti-tank weapons, mines, obstacles, infantry, combat engineers, and transport helicopters with strictly defined characteristics. In fact, there would be incentives to strengthen them. Thus the restructuring of forces to emphasize defense over offense would be built into the reduction process from the outset. And any increases in the alliances' more defensive deployments would be underwritten by the step-by-step savings from reductions in more offensive deployments. To induce participants to give their more defensive forces priority, they might be allowed in the early stages of reductions to reassign half the personnel from units which are cut in the course of armament reductions to units oriented to defense.

The lack of restrictions on defensive armaments and the opportunity early in the reduction process for defensive units to grow in troop strength may seem to invite an arms race in defensive weapons. But there is a safeguard against such a development in the completion of the fifty-percent reduction in active-duty ground- and air-force personnel scheduled to follow the weapons reductions.

The approach we are suggesting provides for staged NATO reductions five to ten times larger than those now proposed by NATO. It would bring deep cuts in full time, active-duty military manpower as well as armaments and cover

three types of armaments whose reduction, at least at an early stage, has been opposed by NATO. Its objective of moving toward a defensive posture from the outset goes beyond the stated objective of both alliances to move toward a defensive posture at a later stage of negotiated reductions.

Let's look now at the first stage of the proposal from several angles: disposal of reduced armaments, reduction by units, and the treatment of manpower, reserve units, aircraft, and missiles. Then we can turn to the final stages, which would bring the forces of both alliances down to fifty percent of NATO's current strength.

IMPLEMENTATION

We have suggested that, for ease of understanding, we try to visualize the reduction process by using reductions in a central European zone as a model or surrogate for the first stage of reductions that would also be going on in other sub-regions of the Atlantic-to-the-Urals area.

There are many possibilities for defining a Central European zone. A useful definition would be what we can call "Central Europe Extended". This zone would cover forces deployed on the territory of France, the Federal Republic of Germany, the Benelux countries, and Denmark on NATO's side. On the Pact side, it would include the territory of East Germany, Czechoslovakia, Poland, Hungary, and the three Western Military Districts of the U.S.S.R. (the Baltic, Byelorussian, and Carpathiar districts). In these territories NATO and the Warsaw Pact deploy most of the active duty and reserve forces that would be involved at an early stage in conflict on the Central Front.

Initial reductions in this area could take one of two forms. Under Alternative One, there would be a comprehensive twenty percent cut of specified armaments of both alliances in the central European area. Reductions would include all holdings of these armaments in both combat-ready and reserve units, as well as all armaments of these types stored by both alliances in the area. In tanks, for example this would probably mean an equal level for both alliances of about 12, 000. (See charts in the annex; figures are rough illustrative calculations based mainly on data in the International Institute for Strategic Studies' Military Balance, 1988-89. Please note that IISS figures cover armaments stored by NATO but its figures for armaments stored by the Pact may not be complete.)

This new ceiling is calculated on the basis of about 10,000 tanks in NATO units in the area plus 5,800 NATO tanks in storage, including United States war reserves and United States POMCUS (Prepositioning of Material Configured to Unit Sets) stocks held in Western Europe for reinforcement units stationed in the United States, whose personnel could be flown in a crisis to join up with their equipment. The starting tank figure for the Pact is about 25,000 after implementation of unilateral reductions announced in 1988. This figure includes the tank holdings of all organized Pact units whether classed as ready or not ready. The Pact figure might be increased to include further Pact tanks in storage when accurate figures are available from data exchange discussion and on-site inspection.

Like Alternative One, NATO's starting approach for CFE also provides for overall parity in armaments of both alliances whether deployed in units or stored. But NATO's proposals for geographic sub-regions, including those for central Europe, call for limits to be placed only on tanks held by "active units", excluding stored tanks. "Active" units as defined by NATO (Conventional Forces in Europe: The Facts) are units presently manned at above five percent of their full wartime strength. This definition includes both combat-ready and reserve units.

The effect of this proposal is to omit NATO's own stored tanks from reductions, yet to count into the reduction base all known Soviet tank holdings, including those held in mobilization units with a cadre of care-taker personnel. In justifying this effort to gain exemption for its own stored armaments, NATO will correctly use the geographic argument that the Pact's main source of reinforcements, the Soviet Union, is close to the line of confrontation between the alliances while the United States, NATO's main source of reinforcements, is far from that line.

Despite Soviet flexibility, this argument may not work since it could leave NATO with nearly 6,000 more tanks in central Europe than the Pact, about fifty-percent more. That is why the Alternative One approach suggested here includes stored tanks as well as those in units, even in the subregions.

There is another problem with NATO's "active" unit definition. It may be suitable for a reduction approach where all reductions take place in a single stage and NATO reductions are held to a minimum. But for a multi-stage

continuing process of negotiated reductions like that suggested here, with reduction by disbanding units, manpower reductions, and residual ceilings on units reduced, it could make it difficult for NATO to have an adequate number of low-manpower reserve units equipped with their own armaments.

Alternative Two is a perhaps more negotiable substitute for NATO's comprehensive approach of cutting all armaments in the Atlantic-to-the-Urals area, whether held by active-duty units, reserve units, or in storage in one move. It would also permit a distinction to be made between active-duty and reserve units in the event of deeper cuts, giving better protection to NATO's reserve capability.

Under Alternative Two, the first-stage reductions wold be on a narrower basis. They would consist of a twenty-percent cut of the specified armaments held only by combat-ready NATO active-duty units, with Pact armaments held by the same type of active-duty units reduced to the new NATO level. As the term is used here, ready active-duty units are equivalent to Pact Category I units, with over seventy-five percent of their wartime manpower, and Category II units, with over fifty percent of wartime manpower. The armaments of reserve units of both alliances deployed in the Atlantic-to-the-Urals reduction area, equivalent to Pact Category III units with no more than twenty percent of their manpower, as well as stored armaments not held by units, would not be reduced, but would be placed under a no-increase ceiling, subject to verification.

Under Alternative Two, the proposed twenty-percent reductions would leave the alliances with approximately 8,500 tanks each in Central Europe. This number is calculated on the basis of an estimated starting figure of roughly 10,000 NATO tanks in ready units in the reduction area and of 16,000 Pact tanks in Category I and II ready units in the area, following Soviet and Pact unilateral reductions.

The big change is in the number to be cut by the Pact which, for example, drops from about 13,500 tanks under Alternative One's comprehensive approach to 7,500 under Alternative Two; Pact artillery and armored troop carrier reduction are also about fifty percent less under Alternative Two than under the comprehensive approach. Under Alternative Two, reductions of aircraft, armed helicopters and surface-to-surface missiles do not change because these armaments are as a rule held only by active-duty units in the Atlantic-to-the-Urals area. Despite the forthcoming Soviet position at the outset of CFE, the

negotiations may develop in such a way that a more easily negotiated first step is desirable for both sides.

Whatever approach might be used for initial reductions, at the end of the fifty-percent reduction process, total tank holdings of all NATO and Warsaw Pact states, not only of those in central Europe, would amount to 10,000 of the present approximately 22,000 NATO total; in the Central European Extended region, each alliance would have about 5,000 tanks. (If a Restricted Military Area were in force, none of these Pact tanks could be closer than 100 kilometers to the line of contact of the two alliances.)

In this suggested fifty-percent reduction program, the reduction ratio of Pact to NATO reductions changes from about 17:1 in the current NATO proposal (2,000 NATO tanks to 37,000 Pact tanks before unilateral cuts) to 4:1 (47,000 Pact tanks to 12,000 NATO tanks) because under the fifty-percent reduction approach, NATO would be making sizable cuts as well as the Pact.

DISPOSAL OF REDUCED ARMAMENTS

It is suggested that if aircraft are reduced, as is recommended here, they should be placed in secured storage--sealed hangars with a small observer contingent from the opposing alliance. Surface-to-surface missiles reduced by agreement should be destroyed. The armaments and armor of armed helicopters would be removed and the aircraft could be used for transport. The tanks, artillery, and infantry-fighting vehicles drawn from active service might also be destroyed. However, each alliance might be given the option of transferring these three types of equipment from active-duty units to reserve units and destroying instead an equivalent number of older weapons of the same type. This is not an ideal solution from the viewpoint of cutting combat capability, but it is likely to be what both alliances want to do.

If Alternative Two, focussed on combat-ready units, is used for initial reductions, armaments of the type being reduced now held by reserve units (in the central European area, mainly Category III Pact divisions and Belgian and Dutch reserve divisions), as well as equipment in U.S. POMCUS storage and war reserve, would fall under a no-increase commitment and would be placed in secured storage in their present locations. On grounds of the remoteness of the United States from the reduction area, this would also be done with the armaments of United States units reduced by agreement.

Thus the phase-one reduction agreement would in one form or another restrict the level of reduced armaments deployed with units, in storage, repair, and transit. Reduced armaments found elsewhere in the reduction area would be a violation, with one exception--armaments at production plants. NATO's present proposals deal only with armaments deployed in units or in separate storage like Pomcus. They do not deal with continuing production in the reduction area of armaments reduced by agreement. Such production is a major possibility for circumvention and breakout from a reduction agreement.

Here, it is suggested that production plants in the Atlantic-to-the-Urals area producing armaments of the type reduced would not be restricted as to the amount of production, nor would the production process itself be subject to inspection--U.S. and Soviet production outside the reduction area would also not be restricted. But the armaments produced by these plants would have to be kept in designated, secured storage areas near the production plant. Removals from secured storage would be notified. When intended for transport outside the Atlantic-to-the-Urals area, these armaments would pass through exit/entry points manned by the opposing alliance. They could also be exchanged on a one-for-one basis to replace existing armaments deployed in the reduction area, whose destruction would have to be observed. United States, Canadian and Soviet production outside the Atlantic-to-the-Urals area of armaments reduced by agreement inside the area would be subject to a reporting requirement.

Reporting production totals and making use of secured storage seems a reasonable course for production of reduced armaments inside the Atlantic-to-the-Urals area, given the two alternatives. One is to restrict the coverage of a reduction agreement only to armaments in deployed units. This would permit both alliances to manufacture and store as many reduction-category arms as they wished near active-duty and reserve units, a practice that would undermine the intent of the reductions. The other is to restrict production of reduction-category arms inside the Atlantic-to-the-Urals area, a scheme that would leave out of account the fact that many Soviet and all American and Canadian installations would not be so restricted.

REDUCTIONS BY UNITS, MANPOWER REDUCTIONS

To most effectively diminish combat potential and to aid verification, reductions should be by units (probably units of battalion size, the largest

unit generally equipped with a single major armament) until the armament reduction quota is exhausted; that is, by battalions holding tanks and artillery, and by comparable air-force units. Residual ceilings would be placed on units of the type reduced. (As we have seen, NATO's opening proposal did not do this.)

Reduction through cutting battalions holding reducible armaments will permit the alliances to retain in the area existing units of other types, like infantry, combat engineers, and antiaircraft. It will also require each alliance to restructure remaining forces, thus moving toward a more defensive orientation. To encourage this trend, as an exception, armored troop carriers would be withdrawn as armaments rather than in battalion form, and their infantry units left in the reduction area.

NATO forces would retain the forward-defense strategy. Present NATO corps sectors in Federal Germany, including those of the allies, would be maintained. Whether or not the Restricted Military Area proposed here is established on both sides of the line of contact between the alliances, NATO's reduced force of armored divisions would be pulled back somewhat from front line positions, and a forward belt of infantry, combat engineers, rocket artillery and rapidly-emplaceable obstacles would be established.

Reduced units of both alliances should be disbanded, their manpower discharged from active duty, and the manpower ceiling for both alliances dropped accordingly. An initial agreement would also provide for an overall reduction to an equal ceiling for both alliances of twenty percent of active-duty ground and air force manpower of the two alliances, which appear approximately equal if the same definitions are applied on both sides. (See IISS data in annex.) The manpower of disbanded units would be credited to this overall manpower reduction quota.

NATO's opening proposal does not foresee manpower reductions or manpower ceilings. However, deep cuts in manpower are necessary to cut defense budgets, and they should begin from the outset of reductions. The known difficulties of verifying manpower levels should be soluble, given greater Pact openness in providing data and permitting intrusive on-site inspection. Moreover, there is not much point in reducing units of one type and allowing limitless overall

increase in units equipped with other armaments or in remaining artillery and tank units.

An alternative would be to permit the conversion of reduced battalions to form new reserve units by discharging their active-duty personnel down to a cadre staff of no more than twenty percent of their war-time manning level, placing their reduced armaments in secured storage. Soviet units of this type would have to be withdrawn to specified areas just west of the Urals. This approach would decrease active-duty forces on both sides, especially the Warsaw Pact's. But it would also increase the reserve holdings of both alliances. NATO is already concerned about existing Soviet reserve capability, and its concern will increase as unilateral Soviet reductions address NATO's other main worry--surprise attack. Moreover, it is improbable that the Soviets would agree to refrain from establishing new Soviet reserves while permitting NATO to increase its reserve units.

Therefore, it is preferable to reduce at the outset by disbanding units, mainly battalions, and by applying residual ceilings to units of the type reduced. Thus, Soviet ground-force reductions would take place through withdrawing active-duty units, disbanding these withdrawn units, and destroying their equipment or turning it over to existing reserve units and destroying the present holdings of these reserve units in reducible armaments. A second phase of reductions could permit conversion of active-duty units to reserves.

TREATMENT OF RESERVE UNITS

As noted, NATO military officers are especially concerned about the Soviet Union's large existing reserve capacity, mainly in Category III ground-force divisions. Within about ninety days, the Warsaw Pact could field a total of about 215 ground-force divisions in the area west of the Urals versus NATO's maximum of about 140, giving the Pact a considerable preponderance in numbers of organized ground-force combat units in a situation of full mobilization. Moreover, as we have seen, some Western experts speculate that, with a program of long-term, unobtrusive training to improve the readiness of Soviet reserve units, the Soviet Union could gain decisive advantage over the West and move to exploit it in an attack.

In theory the Soviet reserve problem would become less acute if conscription were eliminated in the U.S.S.R., thus cutting back the mobilization base

of trained personnel. The Soviet government took the first step in this direction in March, 1989, by eliminating conscription of university students. But elimination still may be far off. In practice, both alliances will regard their reserves as insurance against a recurrence of East/West tensions.

The first phase of a CFE agreement should therefore include measures that can provide NATO countries further reassurance on the issue of Soviet reserves. Under the Alternative One approach of reducing all types of units and storage of arms from the outset, Soviet and Pact reserve units would be reduced from the beginning with other types of units. Under the Alternative Two approach, where only ready units are reduced, we have already suggested two measures affecting Soviet (as well as NATO) reserve units: their overall number should be restricted and their holdings of armaments of the type reduced should be subject to a no-increase provision and placed in secured storage, periodically reported, and subject to verification.

As a further measure applicable to both alternatives, despite the difficulty of verifying manpower reductions, a ceiling should be placed on the active-duty manpower assigned to full time duty in reserve units. This ceiling would hold the level of full time active-duty personnel in reserve units to no more than twenty percent of the wartime manning level of the unit. Reserve units in both alliances would also be obligated to give a year's notice before calling up reserve personnel for training and present calendars of reserve-unit training involving more than 8,000 men or two brigades. They would have to give six month's notice of small-unit training and invite observers to all training exercises involving 8,000 men or more.

Finally, agreed limits might be placed on the number and size of out-of-garrison reserve-training activities. This numerical restriction would be the same type of limit as that which has been discussed for active-duty units, but with a lower ceiling, perhaps 20,000 men or the combat elements of two divisions. Only one such exercise could be held at a time, with no more than two larger exercises annually, prenotified a year in advance, as exceptions to permit training of reserve units together with active-duty units. NATO has in the past opposed restrictions on the size of out-of-garrison activities of active-duty units. It may be more willing to consider such restrictions for reserve units.

AIRCRAFT REDUCTIONS

Reducing aircraft presents special difficulties: NATO's reluctance after the INF treaty to eliminate any more nuclear delivery systems; the capability of aircraft to return rapidly to the reduction area if reduction is by withdrawal; opposition to destroying expensive aircraft as a reduction method; the problems of controls on aircraft production to avoid circumvention; the difficulties of working out trade-offs among aircraft of different types and quality; whether reductions should deal with aircraft in place or also consider reinforcement aircraft; the problem caused by the Pact's superior number of interceptor aircraft; and whether measures to restrict infrastructure should be sought.

Intrinsically, aircraft reduction is probably the knottiest problem of the current negotiations. Nonetheless, NATO should consider including aircraft in force reductions from the outset.

The reasons for doing so appear conclusive: Political leaders in the Soviet Union, and especially the Soviet military, will expect some quid pro quo for agreeing to make much larger tank and artillery reductions than NATO. Soviet and Eastern European leaders have insisted on reduction of NATO aircraft as part of a CFE agreement. Despite continuing flexibility, they appear likely to insist on this. If the West expects the Soviets to deal with its main concern--Pact armored attack--then it should be prepared to make at least a modest step toward meeting Soviet concerns. Moreover, if one major objective of reductions is to move toward greater stability in the East/West military confrontation and to provide greater security for the NATO alliance, then ground-attack aircraft, which were a primary weapon in Hitler's blitzkrieg attacks, and which would be the first wave of any future Pact attack on the West, should also be reduced.

Once again using central Europe as an illustrative model, it is suggested that, in a phase-one agreement, ground-attack aircraft already deployed in the central European area, plus the aircraft deployed in the home territory of the U.K., a major base for NATO fighter-bombers, and those in the Kiev Military District of the Soviet Union, a major deployment area for Soviet fighter-bombers, be reduced by twenty percent of the numerically weaker force. (See annex.)

Using the reduction base suggested here, NATO is the numerically weaker force. Reductions would cover only aircraft already deployed in the reduction

area. Reinforcement aircraft based outside the Atlantic-to-the-Urals area would be omitted because there is no objective way to determine in advance how many of their available aircraft U.S. and Soviet commanders would commit to conflict in Europe if war began.

The categories of aircraft to be covered by reductions might include tactical ground-attack aircraft, like the A-10 and Alphajet and the Pact's SU-25; fighter-bombers, such as the F-16, F-111, Tornado, and the Pact's SU-24; and the medium bombers--Badgers, Blinders, and Backfires--of the Smolensk Air Army deployed west of the Urals. To reduce ambiguity, the reduction base would also include multi-role aircraft on both sides, like the F-16 and MiG-21, which are built to function both as ground-attack aircraft and fighters.

Using this base, a twenty-percent reduction would mean a NATO cut of about 400 aircraft to a common ceiling of approximately 2,000 for this reduction area, and a Pact reduction of about 1,200 aircraft to the same ceiling. As shown in the annex, we have included multi-role aircraft of both sides in the reduction base. The data there indicate that, before reductions, there may be about 2,000 aircraft for NATO and 2,800 for the Pact in the air reduction area defined above. This calculation also assumes that four hundred aircraft, or half of the 800-aircraft unilateral Soviet reduction announced by General Secretary Gorbachev in December, 1988--our rough estimate of the number of unilateral reductions which might be drawn from our reduction base--have already been withdrawn before reductions take place. Refinement of data and definitions might alter these figures. In that case, following the general approach recommended here, reduction would be by twenty percent of the numerically weaker alliance, with the stronger alliance reducing to the new level.

Despite the fact that Pact reductions under this approach would probably be considerably larger than NATO's, it is plausible that, given its interest in getting some hold over NATO air assets, the Pact would accept them. Reduction could be by secured storage in hangars or sheds in the reduction area; destruction might be politically unpalatable and withdrawal too easily reversed. However, here, too, destruction is the more definitive and therefore intrinsically more desirable form of reduction. NATO might find some older aircraft to fill out its reduction quota, but with a reduction as large as that

shown by our figures, many of the aircraft destroyed by the Warsaw Pact would have to be recent models.

To deal with the problem of the Warsaw Pact's numerical superiority in interceptor aircraft, the Pact could freeze the number of its interceptor aircraft and give NATO the right to increase to the Pact's level--"room at the top." NATO is not likely to exercise that option right now, but it might be useful to have someday as both sides configure their forces more defensively. The interceptor aircraft of both alliances should be subject to inspection to assure that they have not been equipped for ground combat. This approach would require an agreement on the distinctions between ground-attack and interceptor aircraft. For aircraft which may be deployed in the future, some Soviet experts suggest that the distinction between attack and interceptor aircraft might be made on the basis of restricting the take-off gross weight measuring the lift or load-carrying capacity of interceptor aircraft.

Control of the production of aircraft in the central European subregion would be as suggested here for ground-force armaments--reporting production, placing the newly-produced aircraft in secured storage near the production plant, and reporting all movements inside the reduction area and departure from it. The U.S., Canada, and the U.S.S.R. could also be obligated to notify fellow participants in an agreement of their production of ground-attack aircraft outside the reduction area. Participants also might consider whether for the short-term some restriction could be imposed on the quantity of forward-stored aircraft munitions and infrastructure.

MISSILE REDUCTIONS

Negotiated reduction of tactical-range surface-to-surface missiles in Europe is currently a highly controversial issue within the NATO alliance. However, it is our assumption that, if progress is made on conventional reductions, negotiations on reducing tactical-range missiles will also be held. This issue could be negotiated separately by the U.S. and U.S.S.R. outside the alliance-to-alliance framework, with appropriate means of coordination with their respective allies and with the progress of the CFE talks. An alternative, probably permissible under the terms of the agreed mandate, would be to negotiate in the CFE talks themselves. However, the bilateral U.S./Soviet

framework might better meet the apprehensions of France and Britain, who fear a creeping process moving toward restrictions on their own nuclear forces. As in INF, the U.S. should seek to exclude French tactical-range surface-to-surface missiles from reductions unless France ultimately proves willing to include its armaments in reductions.

The U.S./Soviet negotiations would cover all Warsaw Pact holdings and the holdings of all NATO countries deploying Lance (Belgium, Netherlands, the U.K., the Federal Republic of Germany and Italy), with the U.S. advised by a steering committee of these allies. A precondition for holding these talks, to be agreed among the NATO allies and also between the U.S. and the Soviet Union, is an explicit understanding that their objective would be reduction of surface-to-surface missiles to an equal level somewhat lower than NATO's present holdings, rather than the complete elimination of these missiles. Soviet negotiators have shown some understanding for NATO sensitivities about further nuclear reduction to a "third zero" in tactical-range armaments. Consequently, an effective understanding on this subject seems possible.

To meet the concerns of some NATO states about the premature reduction of NATO's nuclear deterrent forces, the U.S./Soviet missile reduction talks could be timed to begin only after tentative agreement had been reached on reduction of other armaments, and as a culminating phase of a first-stage reduction agreement. But they cannot be omitted from the negotiating process and should be considered as part of it from the outset. There would be no lasting gain in Western security from a NATO/Pact force reduction in Europe that left the Warsaw Pact a superiority in surface-to-surface missiles under 500-kilometer range of over 5,000, with most northern European NATO members within range of these missiles. This large arsenal of missiles might well be used in a conventional mode or with chemical charges at the outset of hostilities against NATO's air assets, command installations, and other critical facilities.

Conforming to the overall reduction approach suggested here, it is suggested that the present number of U.S. tactical-range missiles deployed in Europe--roughly 600--also be reduced by twenty percent to a level of about 480, and that the number of Pact missiles be reduced from about 6,000 to the new equal level of 480. It is proposed to cut missiles rather than launchers because launchers of this type usually have many easily usable reload missiles. The missiles eliminated would be destroyed as in INF. A ceiling on missiles

rather than launchers would also permit NATO more flexibility if it were decided to restrict both conventional and nuclear weapons; limiting reductions to launchers would require the development of separate launchers other than the Multiple-Launcher Rocket System now planned for use with both the Lance follow-on and the ATACM missile. Restricting missiles rather than launchers would probably be more difficult to verify. Ultimately, it might require controls on production by the United States and the Soviet Union, an issue which in any case will have to be resolved for the negotiations on strategic missiles.

This outcome would permit some future deployment of the ATACM with conventional warhead and of a modernized Lance follow-on using the same launcher as ATACM, with freedom for NATO to decide how many should be nuclear and how many conventional, but only under this low ceiling.

NATO willingness to limit its deployment of conventional ATACMs, the cutting edge of Follow-on Forces Attack technology, to fit under an agreed ceiling for all surface-to-surface missiles could provide some negotiating leverage for the highly asymmetrical reductions of Pact missiles proposed here. The level of missiles equipped with conventional warheads should be limited, as in INF, to promote verification. It should also be limited in order to avoid a large-scale proliferation of missiles equipped with conventional (or chemical) warheads, which would place the entire region on a hair trigger.

NATO would be trading a negotiated restriction on its right to deploy new American missiles in advance of their actual deployment against Pact reductions in missiles and armor, as it did in the INF talks, where, despite much criticism, this procedure ultimately proved successful. In later phases of reduction, the holdings of both alliances in nuclear bombs and standoff missiles for aircraft and in nuclear artillery shells would be reduced to a low equal level. Verifying such reduction, like verifying the reduction of tactical-range missiles, would be difficult; it might ultimately involve supervised destruction and controls over U.S. and Soviet production facilities.

LATER STAGES

So far, we have been discussing a first round of reductions in tanks, artillery, armored troop carriers, armed helicopters, ground-attack aircraft, and surface-to-surface missiles by both alliances to a new level twenty percent

below NATO's present holdings. The first-phase agreement might provide for an implementation period of two to three years and contain a general commitment to move down to a final level representing fifty percent of NATO's current holdings. New negotiations on implementing this commitment would begin as soon as the first-phase agreement took effect. In these subsequent stages of negotiation, the designated armaments of both alliances in the Atlantic-to-the-Urals area would be cut by equal amounts through unit reductions with a sinking manpower ceiling at the level of the weaker alliance, until they included a further thirty percent of NATO's starting total in these armaments.

The objective would be to complete the reduction process within ten years of the first reduction. The implementation of each reduction phase would be dependent on the satisfactory implementation of the preceding phase. In the final phases of negotiation, which should begin in the eighth year from the beginning of the implementation of phase-one, active-duty ground and air-force manpower of both alliances in the entire Atlantic-to-the-Urals area would be further reduced so that the total manpower reduction would amount to fifty percent of NATO's current level. Given their large size, these manpower reductions would require cutbacks in weapons and equipment not reduced by agreement, but the selection would be left to each alliance.

SAVINGS

After completion of the proposed program for deep cuts, the reduction in fifty percent of NATO holdings of the specified armaments and by fifty percent of NATO active-duty ground and air-force personnel should enable European NATO countries to realize important savings in their current defense expenditures, perhaps up to thirty percent or more of their total expenditures. European savings would be considerably larger than those of the United States, because European NATO countries provide roughly eighty percent of NATO forces deployed in Europe. Given this larger saving, the European NATO countries might be wiling to devote a certain proportion of these savings to additional payment for infrastructure and support costs for United States forces remaining in Europe.

Under the proposed reduction approach, United States ground and air force personnel in Europe would be reduced by fifty percent, to a level of about

150,000, with a reduction of two and one-half ground-force divisions and five air-force wings. To realize real savings for the United States, these units and a proportionate amount of supporting infrastructure in the U.S. should be disbanded and the personnel level of the U.S. Army and Air Force in the United States reduced accordingly.

Annual savings would begin in the first year of implementation of reductions. In a preliminary assessment (for details, see annex), the Defense Budget Project, a public interest group based in Washington, D.C., has estimated that annual savings on completion of reductions after ten years might be from $10 to $17 billion (fiscal 1989 dollars). These estimates include the following savings: withdrawing 100,000 Army troops ($4.8 billion); withdrawing five tactical air wings ($1.3 to $4.0 billion); converting two to three U.S.-deployed Army divisions to reserve status ($2.4 to $3.6 billion); converting five tactical Air Force wings deployed in the United States to reserve ($1.3 to $4.0 billion); and reduced purchase of Army tactical missiles ($1.0 to $1.5 billion). Other analysts have calculated that additional savings from reductions in ground and air force units could total another $6 billion annually.

Increased contributions from European NATO countries (financed out of their own savings from reductions) to U.S. infrastructure in Europe might range up to $10 billion annually, yielding an upper estimate of about $30 billion in savings per year for the United States. If NATO were willing not only to store equipment of reduced U.S. units but to forgo some of its modernization, still larger savings of about $10 billion annually could be made.

THE OUTCOME

After the proposed reductions have taken place, both NATO and the Warsaw Pact would have forces in the Atlantic-to-the-Urals area of equal size in offensive weapons and active manpower, but forces of more limited mobility and range, with greater emphasis on defensive elements. Defensive restructuring would have taken place in the Restricted Military Area and, as reductions proceeded, in forces throughout the reduction area. The defensive capacity of each alliance, untouched by negotiated reductions in armaments and by initial

manpower cuts, would have increased in relationship both to each alliance's own offensive capacity and to the offensive capacity of the opposing alliance.

Each alliance would have a sizable number of penetration weapons for counterattack--for example, 10,000 tanks, about 1,400 ground-attack aircraft, and 300 surface-to-surface missiles. As we have seen, this would be enough to push back aggressive attack but not enough to prevail in an attack against the increased defensive capability of the opposing alliance. Constraints, transparency measures including recurrent information exchange, a system of permanent observers, and a stringent verification system would impede preparation for either surprise attack or full mobilization and give much increased warning if those preparations did take place.

NATO would have reached the stable plateau of reduced risks and costs proposed here as a goal for the CFE talks. If the Soviets reversed their conciliatory policies at some future time, NATO would be considerably better off confronting Pact forces of the size and kind described here than with the present force relationship or with the more limited reductions contained in NATO's current reduction proposal.

MAP 1: Atlantic to Urals Area

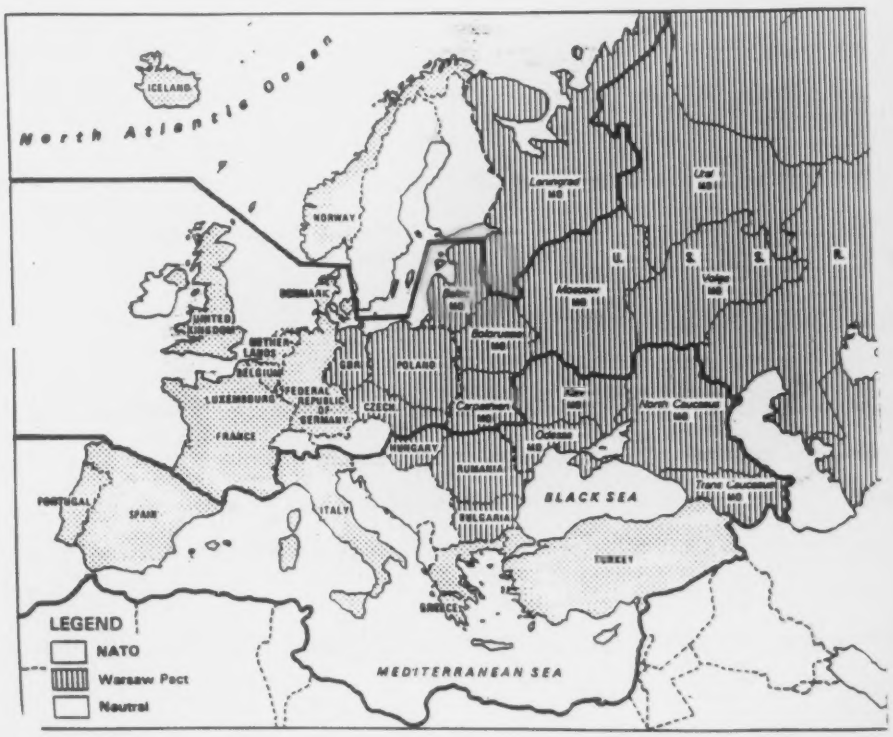


TABLE 1: NATO and Warsaw Pact Forces in Europe--Data Published by the International Institute of Strategic Studies.

	NATO Guidelines Area (NGA)[a]		Jaruzelski Area[b]		Atlantic to Urals		Global	
	NATO[c]	WP	NATO[c]	WP	NATO[c]	WP	NATO[c]	WP
1. LAND/AIR								
Manpower (000)								
Total active ground forces[d]	786	995	803	1,137	2,340	2,143	3,197	2,744
Total ground force reserves[e]	1,167	1,030	1,222	1,157	4,543	4,239	5,710	5,340
Divisions[f]								
Manned in peacetime[g]	29⅓	49⅓	31⅓	58	105⅓	101⅓	125	127⅓
Manned on mobilization of reserves[h]	10⅓	12	12⅓	14	36	113	54⅓	158
Total war mobilized	40⅓	61⅓	44⅓	72	141⅓	214⅓	179⅓	285⅓
Ground Force Equipment[i]								
Main battle tanks	12,800	18,800	13,000	21,300	22,200	53,000	33,600	68,900
MICV[j]	4,400	8,700	4,400	9,800	6,200	23,600	9,900	31,400
Artillery (incl MRL)[k]	3,100	11,100	3,500	12,200	10,600	36,000	17,000	48,700
Mor (120mm and over)	1,100	2,100	1,200	2,400	2,900	8,300	2,900	11,700
ATGW, ground-based[l]	6,200	2,650	6,300	3,100	11,000	13,700	28,300	22,400
AA guns[m]	3,100	2,200	3,200	2,400	9,000	11,000	9,900	14,100
SAM[m]	1,100	2,600	1,200	3,000	2,400	12,400	3,400	15,500
Armed hel[n]	516	545	516	635	864	1,220	3,208	2,105
Land Combat Aircraft[o]								
Bombers[p]	84	225	84	225	350	888	489	1,020
FGA/CAS	978	915	1,017	1,005	2,865	2,330	4,895	3,180
Air defence/fighters[q]	309	1,422	347	1,737	1,178	4,432	2,861	5,755

	European/Atlantic waters		Global	
	NATO	WP	NATO	WP
2. MARITIME				
Naval Forces				
Submarines[r]	206	190	241	272
Carriers[s]	15	2	22	4
Battleships/cruisers[t]	23	24	46	36
Destroyers/frigates[u]	327	193	435	257
Amphibious[v]	69	84	107	117
Naval Air[o]				
Bombers	–	286	–	400
Attack	433	188	899	290
Air defence/fighter	161		347	
ASW fixed-wing ac	232	137	700	219
ASW hel	349	274	704	387

Source: The International Institute of Strategic Studies, The Military Balance, 1988-1989 (London: IISS, 1988), p. 236-237.

TABLE 1

NOTES

[a] The territories of FRG, the Benelux countries, GDR, Poland and Czechoslovakia.
[b] NGA plus territory of Denmark and Hungary.
[c] French and Spanish forces are not part of NATO's integrated military command, but are included in relevant totals.
[d] Ground Forces exclude paramilitary forces, such as border guards and security troops, though these include formations of up to divisional size, hold heavy equipment and would probably fulfil some rear area security functions in war. Warsaw Pact figures could also be increased considerably by the inclusion of a proportion of the men forming railroad, construction, Kommandatura etc. troops. Marines and Naval Infantry have been included, but troops manning air-defence units, when these are part of an Air Force or a separate service, are not.
[e] Normally only men within 5 years of their active service period are included, unless a country entry specifies a different parameter. Home Guard manpower has not been included.
[f] Divisions are not a standard formation between armies; manpower and equipment totals vary considerably (see Table on p. 7). For the purposes of this table we have counted divisional equivalents as being either 3 manoeuvre brigades (normally of 3 battalions plus some supporting units) or 4 regiments (normally groups of battalions of infantry or armour only).
[g] Includes all Soviet and WP Category A and B divisions and NATO formations manned at over 50% of war establishment.
[h] Comprises only forces mobilized within the relevant geographical area. North American-based US and Canadian forces earmarked for reinforcement of Europe are shown under the 'Global' heading.
[i] Totals include all known stocks of materiel whether manned by active or reserve forces, held as maintenance reserves, or in prepositioned sets (POMCUS). It should be noted that information on WP reserve holdings is much more limited than for NATO and the relevant figures much lower. This may be at least in part accounted for by the WP operational practice of replacing spent divisions by follow-on echelons rather than topping them up from reserve stocks.
[j] MICV comprise all armoured wheeled or tracked infantry fighting vehicles armed with a cannon of not less than 20mm calibre.
[k] ATK guns have not been included with artillery this year.
[l] ATGW proliferation presents particular difficulties for realistic counting rules. The figures shown are estimated aggregates of all dismounted ATGW and those vehicle-mounted weapons with a primary ATK role. Soviet Category 3 divisions have been assumed to hold full scales.

Totals exclude ATGW on MICV (e.g. M-2/-3 Bradley BMP BMD) or fired by main battle tank main armament (e.g. T-80) and do not, therefore, represent total available ATGW for either side. The substantial reduction in WP numbers from those presented in *The Military Balance 1987–1988* reflects a revised estimate of the TO & E for BMP-equipped regiments together with an increase in the numbers of such regiments in GSFG.
[m] SAM launchers exclude shoulder-launched weapons (eg, *Javelin, Blowpipe, Stinger*, SA-7/-14/-16). Air Force and separate Air Defence force SAM and AA guns are included.
[n] Comprises all helicopters whose primary function is close air support or anti-tank. IISS data no longer allows us confidently to discriminate between categories for aggregation purposes. Moreover, some can readily reconfigure between roles.
[o] Totals include OCU and training aircraft of the same type as those in front-line squadrons.
[p] Long-range strategic bombers have been excluded (eg, B-1, B-52, Tu-95, Mya-4 and *Mirage* IVP).
[q] Comprises aircraft with the capability (weapons, avionics, performance) to engage in aerial combat. Dual-role aircraft with a ground-attack capability are included in the FGA category unless specified in the national entry as belonging to an AD unit.
[r] Excludes only SSB and SSBN.
[s] The difference in the totals from the figures given in *The Military Balance 1987–88* can be accounted for by the changed rules for designating warships. See pp. 7–8.
[t] Only amphibious ships (ie, over both 1,000 tonnes full-load displacement and 60 metres overall length) are included.

TABLE 2: NATO and Warsaw Pact Air Forces in Central Europe

A. Overall Aircraft in Europe

Reduction Area		Warsaw Pact (current)	NATO
Atlantic to the Urals	Ground Attack	2570 (+400)[a]	2881 (+1034)[b] (+18)[e]
	Fighter-interceptor	2620 (+970)[c]	1245 (+216)[b]
		5190 (+1370)	4126 (+1268)
Central Europe Extended	Ground Attack	1445 (+180)[d] (+400)[a]	1655 (+1034)[b] (+ 18)[e]
	Fighter-interceptor	1975 (+970)[c]	787 (+216)[b]
		3420 (+1550)	2442 (+1268)

Source: Edward Warner, "Approaches to Conventional Arms Reduction," Conventional Arms Control and East-West Security, F. Stephen Larrabee and Robert Blackwill, eds., Durham, North Carolina: Duke University Press, 1989.

[a] Soviet medium bombers of the Smolensk Air Army based in the European USSR.
[b] U.S.-based aircraft earmarked for reinforcement deployment to Europe according to the 1988 CBO study: U.S. Ground Forces and the Conventional Balance in Europe, Congressional Budget Office, June 1988, pp. 97-98.
[c] Soviet fighter-interceptors of the Air Defense Forces for homeland defense based in the European USSR.
[d] Fencer fighter-bombers of the Vinnitsa Air Army based in the Kiev military district.
[e] French Mirage IV P strategic bombers based in France.

TABLE 2 - B

B. NATO Air Forces in Central Europe Extended

	Fighter-Bombers		Fighter-Interceptors	
	Aircraft (Location)	#	Aircraft (Location)	#
United States	F-111E/F	140	F-5E (UK)	19
	A-10A (UK)	108	F-15C/D (FRG/Na)	96
	F-16C/D (FRG)	96[a]	F-16C/D (FRG)	60[a]
	F-4G (FRG)	36		
	Total	380		175
Belgium	F-16A/B	36[a]	F-16A/B	36[a]
	Mirage 5 BA/BD	50		
	Total	86		
Canada	CF-18 (FRG)	18[a]	CF-18 (FRG)	18[a]
Denmark	F-16A/B	26[a]	F-16 A/B	26[a]
	Draken/F-35	15[a]	Draken/F-35	10
	Draken/RF-35	18		
	Total	59		36
France	Mirage IIIE	80[b]	Mirage F-1C	135
	Mirage 5F	30	Mirage IIIE	26
	Jaguar A	127[b]	Mirage 2000B/C	45
	Mirage 2000N	13[b]		
	Total	250		206
Federal Republic of Germany	Tornado (FRG/UK)	190	F-4F	71[a]
	T-4F	71[a]		
	Alpha Jet	153		
	Total	414		
Netherlands	F-16A/B	86[a]	F-16A/B	61[a]
	NF-5	47		
	Total	133		
United Kingdom	Tornado (FRG/UK)	149	Tornado	36
	Harrier (FRG/UK)	51	F-4 (FRG/UK)	114
	Jaguar	63	Hawk	72
	Buccaneer	34		
	Total	297		222
	TOTAL	1637[c]		825[c]

Source: Edward Warner, "Approaches to Conventional Arms Reductions," Conventional Arms Control and East-West Security, F. Stephen Larrabee and Robert Blackwill, eds., Durham, North Carolina: Duke University Press, 1989.

[a] Multirole Belgian, Danish, and Dutch F-16s and Danish Draken F-35's are split between the ground attack and air defense categories in accordance with mission specialization data from the International Institute of Strategic Studies, The Military Balance, 1988-1989, London: IISS, 1988. The multirole US F-16s, Canadian CF-18s, and German F-4Fs, whose pilots ar trained for both air-to-air and air-to-ground combat, have been split evenly between the two mission areas.

[b] Includes French 15 Mirage IIIE, 45 Jaguar, and 13 Mirage 2000N fighter-bombers that are identified by IISS as "prestrategic" nuclear delivery systems. Does not include the 18 French Mirage IV P "strategic" bombers that are configured solely for nuclear delivery.

[c] Includes combat-capable aircraft used in training and conversion units.

TABLE 2 - C

C. Warsaw Pact Air Forces in Central Europe Extended

	Fighter-Bombers		Fighter-Interceptors	
	Aircraft	#	Aircraft	#
Soviet Union				
In GDR, Poland	MiG-27	135	MiG-21	90
Czechoslovakia	Su-17	225	MiG-23	315
& Hungary	Su-24	90	MiG-25	45
	Su-25	45	MiG-29	90
	Total	495		540
In Legnica Air Army	Su-24	225	n.a.	
in Baltic,	MiG-27	180	MiG-21	90
Belorussian &	Su-17	45	MiG-23	135
Carpathian MDs	Su-25	45	MiG-29	135
	Total	270		360
Poland	Su-17	125	MiG-21	360
	Su-7	30	MiG-23	40
	LIM-6	70		
	Total	225		400
GDR	MiG-27	25	MiG-21	225
	Su-17	35	MiG-23	45
	total	60		270
Czechoslovakia	MiG-27	40	MiG-21	225
	MiG-21	45	MiG-23	45
	Su-25	40		
	Su-7	45		
	Total	170		270
Hungary	n.a.		MiG-21	45
			MiG-23	90
			Total	135
TOTAL		1,445[a]		1,975[b]

Source: Edward Warner, "Approaches to Conventional Arms Reductions," Conventional Arms Control and East-West Security, F. Stephen Larrabee and Robert Blackwill, eds., Durham, North Carolina: Duke University Press, 1989.

[a] Does not include the 120 Backfire, 120 Blinder, and 160 Badger bombers of the Strategic Air Army headquartered at Smolensk in Belorussia, although many of these bombers are based in the "Central Europe Extended" area and would very likely be employed to deliver conventionally armed bombs and missiles against NATO targets in Central Europe during a conventional war. A portion or all of the 180 Fencer fighter-bombers of the air army headquartered at Vinnitsa in the Ukraine might also be deployed forward to carry out conventional bombing missions in Central Europe.

[b] Does not include the 135 fighter-interceptors of the Air Defense forces based in the Baltic, Belorussian, and Carpathian Military Districts that protect the Soviet homeland.

TABLE 3: FIRST-STAGE REDUCTIONS UNDER THE NATO AND WARSAW PACT PROPOSALS OF MARCH 1989

A. NATO's Reduction Proposal Using NATO's Data.[a]

	Main Battle Tanks	Armored Personnel Carriers	Artillery/ Multiple Rocket Launchers
NATO Holdings	22,224	47,639	17,328
Reductions	2,224	19,639	828
Proposed NATO/WTO Level[b]	20,000	28,000	16,500
WTO Holdings	39,249[c]	93,400	33,370[c]
Reductions	19,249	65,400	16,870

[a]Data from NATO's Conventional Forces in Europe: The Facts, November 1988.
[b]NATO's proposal outlines an overall holdings level for these armaments, and NATO and the Warsaw Pact must reduce to meet these levels.
[c]Announced WTO unilateral reductions totaling 12,251 main battle tanks, and 10,030 artillery pieces have been subtracted from these totals.

* * *

B. Warsaw Pact's 10% Reduction Proposal Using WTO Data.[a]

	Main Battle Tanks	Armored Personnel Carriers	Artillery/ Multiple Rocket Launchers	Armed Helicopters	Combat Aircraft	Armed Forces Personnel
NATO Holdings	30,690	46,900	57,060	5,270	7,130	3,660,200
Reductions	3,069[b]	4,690[b]	5,706[b]	2,764	951	733,580
Proposed NATO/WTO Level	27,621	42,210	51,354	2,506	6,179	2,926,620
WTO Holdings	47,219[c]	70,330	61,530[c]	2,785	6,866[c]	3,251,800[c]
Reductions	19,598	28,120	10,176	279[b]	687[b]	325,180[b]

[a]Data from "Warsaw Pact Releases Figures on Force Strength's," Foreign Broadcast Information Service: Soviet Union. January 10, 1989, pg. 1-8.
[b]Indicates a 10% reduction for the side possessing the smaller number of holdings in each of the categories as outlined by the WTO reduction proposal.
[c]Announced WTO unilateral reductions totaling 12,251 main battle tanks, 10,030 artillery pieces, 1,010 combat aircraft, and 321,300 personnel have been subtracted from these totals.

TABLE 3 - C

C. NATO and Warsaw Pact First-Stage Reduction Proposals Using the International Institute of Strategic Studies Data.[a]

1. NATO's Proposal

	Main Battle Tanks	Armored Personnel Carriers[b]	Artillery/ Multiple Rocket Launchers
NATO Holdings	22,200	47,639	13,500
Reductions	2,200	19,639	---
Proposed NATO/WTO Level[c]	20,000	28,000	16,500
WTO Holdings	40,749[d]	93,400	34,270[d]
Reductions	20,749	65,400	17,770

[a] Data from the International Institute of Strategic Studies, The Military Balance, 1988-1989, London: IISS, 1988. (See TABLE 1).

[b] The working definition for Armored Personnel Carriers is different in interpretation by NATO and IISS. Therefore, the figure given is in compliance to NATO's definition and is used from NATO's Conventional Forces in Europe: The Facts, November 1988.

[c] NATO's proposal outlines an overall holdings level for these armaments, and NATO and the Warsaw Pact must reduce to meet these levels.

[d] Announced WTO unilateral reductions of a total of 12,251 main battle tanks and 10,030 artillery pieces have been subtracted from these totals.

2. Warsaw Pact 10% Reduction Proposal.[a]

	Main Battle Tanks	Armored Personnel Carriers[b]	Artillery/ Multiple Rocket Launchers	Armed Helicopters	Combat Aircraft	Ground Forces Personnel
NATO Holdings	22,200	46,900	13,500	864	3,215	2,340,000
Reductions	2,220[c]	4,690[c]	1,350[c]	86[c]	1,228	411,300
Proposed NATO/WTO Level	19,980	42,210	12,150	778	1,987	1,928,700
WTO Holdings	40,749[d]	93,400[b]	34,270[d]	1,220	2,208[d]	2,143,000[d]
Reductions	20,769	51,190	22,120	442	221[c]	214,300[b]

[a] Data from International Institute of Strategic Studies The Military Balance, 1988-1989, London: IISS, 1988. (See TABLE 1).

[b] The working definition for Armored Personnel Carriers is different in interpretation by WTO and IISS. Therefore, the figure given is from NATO's Conventional Forces in Europe: The Facts, November 1988.

[c] Indicates a 10% reduction for the side possessing the smaller number of holdings in each of the categories as outlined by the WTO reduction proposal.

[d] Announced WTO unilateral reduction of a total of 12,251 main battle tanks, 10,030 artillery pieces, and 1,010 combat aircraft have been subtracted from these figures. The 321,300 unilateral personnel reduction cannot be subtracted from the IISS ground force personnel figure, because unilateral reductions may contain naval and airforce personnel.

TABLE 4: FIRST-STAGE NATO AND PACT REDUCTIONS PROPOSED IN THIS REPORT

A. Comprehensive NATO and Warsaw Pact Ground Force Reduction Proposal

1. Comprehensive 20% Buildown Reduction Proposal for Central Europe Extended (including armaments held by reserve units and in storage). NATO Forces[a]

	Main Battle Tanks	Armoured Personnel Carriers[b]	Artillery/ Multiple Rocket Launchers	Armed Helicopters[c]	Surface to Surface Missiles[d]
Bel	334	1,267	256	0	
Neth	913	1,995	789	64	
Lux	0	5	0	0	
Den	210	641	450	0	
Fran	1,810	3,010	1,556	417	100
FRG	4,937	3,636	2,338	210	
UK	700	1,792	228	56	
US	6,151	4,268	1,100	234	600
Can	77	191	26	36	
Total	15,132	16,805	6,743	1,017	700
Minus 20%	3,026	3,361	1,349	353[e]	140
New Joint NATO/WTO Level	12,106	13,444	5,394	664	560

[a] NATO figures are for holdings of active duty units and includes stored NATO tanks, which NATO's Conventional Forces in Europe: The Facts of November 1988 estimates at 5800. This storage figure includes 2,887 US war reserve and 1,464 US prepositioned POMCUS tanks. Also, NATO figures include 409 APC's, and 165 Artillery pieces in storage.

[b] This figure is illustrative. NATO is using a new category for reductions which appears to combine armored infantry fighting vehicles and armoured personnel carriers. NATO has not yet made available specific figures for this new category.

[c] For NATO the following types of helicopters were counted: SA-319 Alouette III, SA-330 Puma, SA-341/-342 Gazelle, AH-64 Apache, UH-1 Iroquois, UH-60 Black Hawk, SH-3 Sea King, SA-321 Super Frelon, and AH-1 Cobra.

[d] Surface-to-surface missiles are listed here in terms of missiles. It is estimated that NATO has about 700 missiles for its 127 launchers including French missiles. The total of Pact missiles is estimated at 6,000.

[e] Helicopter figures represent NATO reductions needed to reach new Pact levels following a 20% reduction of Pact helicopters. In the case of armed helicopters, subject to further refinement of data through East-West discussion, NATO's active duty forces hold a larger number than WTO. Throughout this book, we follow a standard approach reducing from the level of the numerically smaller side. In this case, 20% is reduced from the totals of the smaller side (WTO), and NATO must reduce 353 helicopters to meet the new WTO levels.

TABLE 4 - A (continued)

2. Comprehensive 20% Buildown Reduction Proposal for Central Europe Extended (including armaments held by reserve units and in storage). WTO Forces

	Main Battle Tanks	Armored Personnel Carriers	Artillery/ Multiple Rocket Launchers	Armed Helicopters[f]	Surface to Surface Missiles
Czech	3,400[g]	2,500	2,391	200	
Cat. I	1,644	939	810		
II	0	0	0		
III	1,096	626	252		
GDR	2,850[g]	3,750	1,657	100	
Cat I	1,536	1,206	828		
II	0	0	0		
III	0	0	0		
Hun	1,300[g]	1,000	635	40	
Cat I	0	0	0		
II	988	893	558		
III	440	580	288		
Pol	3,950[g]	2,700	2,100	70	
Cat. I	2,300	985	1,062		
II	440	580	394		
III	660	870	432		
USSR	14,200[g]	9,413	10,700[g]	420	6000
Cat. I	5,387	3,848	1,803		
II	3,840	3,641	593		
III	3,724	1,634	1,698		
Total	25,700	19,363	17,483	830	6000
WTO Reduction	13,594	5,919	12,089	166	5440
New Joint NATO/ WTO Level	12,106	13,444	5,394	664[e]	560

[f] For the WTO the following types of helicopters were counted: Mi-24 'Hind', Mi-14 'Haze', Mi-8 'Hip', Mi-6 'Hook', Mi-2 'Hoplite', Mi-1 'Hare', Ka-25 'Hormone', and Ka-27 'Helix'.

[g] Includes Soviet tanks in Hungary and 5 independent Soviet tank regiments in the GDR. In his speech to the U.N. on 12/7/88, Gorbachev announced a unilateral reduction of 5,000 tanks from Soviet Category I units in Eastern Europe. These have been subtracted from Soviet Category I holdings in Central Europe Extended. Gorbachev also announced the unilateral reduction of 8,500 artillery pieces from Soviet forces in the Western USSR and Eastern Europe. For the purposes of this estimate, we have deducted half or 4,200 from Category I and II divisions in Central Europe extended. This estimate does not include announced Eastern European unilateral cuts as it is not yet fully clear from which type of units will be reduced.

The total of main battle tanks, armored personnel carriers and artillery for Category I, II & III Warsaw Pact units is somewhat less than the total aggregate figures shown for each of these armaments in the chart. This mismatch, which we are pursuing, probably has several causes: IISS total figures, which we used for artillery and tank totals, apparently include three more category III Soviet motorized rifle divisions in the Western military districts than the CBO figures, which we used as a guide for Soviet ground force units. There may be some allowance in IISS figures or training units, repair and storage.

TABLE 4 - B

B. Alternate NATO and Warsaw Pact Ground Force Reduction Proposal

1. Alternate 20% Buildown Reduction Proposal for Central Europe Extended (excluding armaments held by reserve units and in storage). NATO Forces[a]

	Main Battle Tanks	Armoured Personnel Carriers[b]	Artillery/ Multiple Rocket Launchers	Armed Helicopters[c]	Surface to Surface Missiles[d]
Bel	320	1,058	248	0	
Neth	750	1,795	672	64	
Lux	0	5	0	0	
Den	210	641	450	0	
Fran	1,810	3,010	1,416	417	100
FRG	4,937	3,636	2,338	210	
UK	700	1,792	228	56	
US	1,800	4,268	1,100	234	600
Can	77	191	26	36	
Total	10,604	16,396	6,478	1,017	700
Minus 20%	2,120	6,722*	1,296	353*	140
New Joint NATO/WTO Level	8,483	9,674	5,182	664	560

[a] NATO figures are for holdings of active duty units and exclude stored NATO tanks, which NATO's Conventional Forces in Europe: The Facts of November 1988 estimates at 5800. This storage figure includes 2,887 US war reserve and 1,464 US prepositioned POMCUS tanks. Also, NATO figures do not include 409 APC's, 140 Artillery pieces in storage.

[b] This figure is illustrative. NATO is using a new category for reductions which appears to combine armored infantry fighting vehicles and armoured personnel carriers. NATO has not yet made available specific figures for this new category.

[c] For NATO the following types of helicopters were counted: SA-319 Alouette III, SA-330 Puma, SA-341/-342 Gazelle, AH-64 Apache, UH-1 Iroquois, UH-60 Black Hawk, SH-3 Sea King, SA-321 Super Frelon, and AH-1 Cobra.

[d] Surface-to-surface missiles are listed here in terms of missiles. It is estimated that NATO has about 700 missiles for its 127 launchers including French missiles. The total of Pact missiles is estimated at 6,000.

* APC and Helicopter figures represent NATO reductions needed to reach new Pact levels following a 20% reduction of Pact helicopters and APC's. In the case of APC's and armed helicopters, subject to further refinement of data through East-West discussion, NATO's active duty forces hold a larger number than WTO Category I & II forces in the Central European reduction area. Throughout this paper, we follow a standard approach reducing from the level of the numerically smaller side. In this case, 20 % is reduced from the totals of the smaller side (WTO), and NATO must reduce 6,722 APC's and 353 helicopters to meet the new WTO levels.

TABLE 4 - B (continued)

2. Alternate 20% Buildown Reduction Proposal for Central Europe Extended (excluding armaments held by reserve units and in storage). WTO Forces

	Main Battle Tanks	Armored Personnel Carriers	Artillery/ Multiple Rocket Launchers	Armed Helicopters[1]	Surface to Surface Missiles
Czech	3,400[2]	2,500	2,391	200	
Cat. I	1,644	939	810		
II	0	0	0		
III	1,096	626	252		
GDR	2,850[2]	3,750	1,657	100	
Cat I	1,536	1,206	828		
II	0	0	0		
III	0	0	0		
Hun	1,300[2]	1,000	635	40	
Cat I	0	0	0		
II	988	893	558		
III	440	580	288		
Pol	3,950[2]	2,700	2,100	70	
Cat. I	2,300	985	1,062		
II	440	580	394		
III	660	870	432		
USSR	14,200[2]	9,413	10,700[2]	420	6000
Cat. I	5,387	3,848	1,803		
II	3,840	3,641	593		
III	3,724	1,634	1,698		
Total	25,700	19,363	17,483	830	6000
Category I&II	16,135[2]	12,092	6,048[2]	-	-
WTO Reduction	7,652	2,418	866	166	5440
New Joint NATO/ WTO Level	8,483	9,674[3]	5,182	664[3]	560

[1] For the WTO the following types of helicopters were counted: Mi-24 'Hind', Mi-14 'Haze', Mi-8 'Hip', Mi-6 'Hook', Mi-2 'Hoplite', Mi-1 'Hare', Ka-25 'Hormone', and Ka-27 'Helix'.

[2] Includes Soviet tanks in Hungary and 5 independent Soviet tank regiments in the GDR. In his speech to the U.N. on 12/7/88, Gorbachev announced a unilateral reduction of 5,000 tanks from Soviet Category I units in Eastern Europe. These have been subtracted from Soviet Category I holdings in Central Europe Extended. Gorbachev also announced the unilateral reduction of 8,500 artillery pieces from Soviet forces in the Western USSR and Eastern Europe. For the purposes of this estimate, we have deducted half or 4,200 from Category I and II divisions in Central Europe extended. This estimate does not include announced Eastern European unilateral cuts as it is not yet fully clear from which type of units they will be reduced.

The total of main battle tanks, armored personnel carriers and artillery for Category I, II & III Warsaw Pact units is somewhat less than the total aggregate figures shown for each of these armaments in the chart. This mismatch, which we are pursuing, probably has several causes: IISS total figures, which we used for artillery and tank totals, apparently include three more category III Soviet motorized rifle divisions in the Western military districts than the CBO figures, which we used as a guide for Soviet ground force units. There may be some allowance in IISS figures or training units, repair and storage.

Main Sources:

The International Institute for Strategic Studies, The Military Balance, 1988-1989 London: IISS, 1988.

Conventional Forces in Europe: The Facts, NATO November 1988

U.S. Ground Forces and the Conventional Balance in Europe, Congressional Budget Office, June 1988.

TABLE 4 - C

C. Nato and Pact Air Forces in Central Europe Extended

1. NATO Attack Aircraft in Central Europe Extended.[a]

20% Buildown Reduction Proposal		
Location	Aircraft[b]	
BELGIUM	F-16	72*(36)
	Mirage-5F	50
	total	122
CANADA (in the FRG)	F-18	36*(18)
DENMARK	F-16	52*(26)
	Draken	43*(10)
	total	95
FRANCE	Jaguar	127
	Mirage III	80
	Mirage 5-F	30
	Mirage 2000B/C	13
	total	250
FRG	AlphaJet	153
	F-4	142*(71)
	Tornado	190
	total	485
NETHERLANDS	F-5	47
	F-16	147*(61)
	total	194
UNITED KINGDOM (in UK and FRG)	Buccaneer	34
	Harrier	51
	Jaguar	63
	Tornado	149
	total	297
UNITED STATES (in UK and FRG)	A-10	108
	F-4	36
	F-16	156*(60)
	F-111	140
	total	440
	NATO TOTAL	1,919
	Minus 20%	384
	New Joint NATO/WTO Level	1,535

[a] TABLE 4 - C is derived using TABLE 2 as the base.

[b] For the purposes of the reduction purposal set forth in this report, multi-role aircraft normally classed as fighter aircraft and listed as Fighter-Interceptors in TABLE 2 have been added to the category of attack aircraft in this chart, and are indicated by asterisks. The number of aircraft of each type shifted is shown in parenthesis.

TABLE 4 - C (continued)

2. Warsaw Pact Attack Aircraft in Central Europe Extended.[a]

20% Buildown Reduction Proposal

SOVIET UNION				EASTERN EUROPEAN STATES			
Location	Aircraft[b]			Location	Aircraft[b]		
CSSR, GDR, Poland (including HQ Legnica) and Hungary	Fencer	Su-24	315	CZECHOSLOVAKIA:	Fishbed	MiG-21	270*(225
	Fishbed	MiG-21	(90)*		Flogger	MiG-27	40
	Fitter	Su-17, 20, 22	225		Frogfoot	Su-25	40
	Flogger	MiG-27	135		Fitter A	Su-7	45
	Frogfoot	Su-25	45			total	395
		total	810	GDR:	Fishbed	MiG-21	(225)*
					Fitter	Su-17, 20, 22	35
Baltics, Byelorussia (including HQ Smolensk), and Carpathians	Fishbed	MiG-21	(90)*		Flogger	MiG-27	25
	Fitter	Su-17, 20, 22	45			total	285
	Flogger	MiG-27	180	HUNGARY:	Fishbed	MiG-21	(45)*
	Frogfoot	SU-25	45				
	Backfire	Tu-26	120	POLAND:	Fishbed	MiG-21	(360)*
	Badger	Tu-16	160		Fitter	Su-17, 20, 22	125
	Blinder	Tu-22	120		Fitter A	Su-7	30
		total	760			LIM 6	70
						total	585
Kiev MD including HQ Vinnitsa	Fencer	Su-24	180				
	Flogger	MiG-23	45				
	Flogger	MiG-27	45				
			270				
TOTAL SOVIET UNION			1,840	TOTAL EASTERN EUROPE			1,310

Warsaw Pact Total 3,150[c]

WARSAW PACT TOTAL AFTER DELETING UNILATERAL SOVIET REDUCTION[d] 2,750

TOTAL	2,750
WTO Reduction	1,215
New Joint NATO/WTO Level	1,535

[a] TABLE 4 - C derived using TABLE 2 as the base.

[b] For the purposes of the reduction proposal set forth in this report, multirol aircraft normally classed as fighter aircraft and listed as Fighter-Interceptors in TABLE 2 have been added to the category of attack aircraft in this chart and are indicated by asterisks. The number of aircraft of each type shifted is shown in parenthesis.

[c] To arrive at the 3,150 Warsaw Pact total, we have added to the WTO Fighter-Bombers total in TABLE 2 of 1,445 the 1,035 multirole MiG-21s from the Fighter-interceptors column, the 400 Soviet medium range bombers from the Smolensk Air Army based in European USSR and the 270 aircraft located in the Kiev military district.

[d] According to Gorbachev's reduction proposal 800 combat aircraft would be unilaterally withdrawn. We have arbitrarily subtracted one-half or 400 aircraft from the Warsaw Pact reduction base set forth here.

TABLE 5: POSSIBLE SAVINGS FROM UNITED STATES FORCE REDUCTIONS

Based on the reduction proposal described in this report, the Defense Budget Project has prepared the following estimate:

Savings in the year 2000, Fiscal Year 1989 in billions.

Operations and Support (O&S) Savings from Withdrawing 100,000 Army troops: $4.8 billion

From Congressional Budget Office (CBO) data, adjusted to FY 1989 dollars

O&S Savings from Withdrawing 5 tactical air wings: $1 - 3 billion

CBO, Reducing the Deficit (February 1989) shows annual O&S savings of $700 million from cutting 3 air wings, or $233 million for each wing. The range was provided because CBO's methodology yields a conservative result. The upper range is derived using the following method: Take the total FY 1989 O&S budget for the active duty Air Force (roughly $42 billion), assume that half of this amount is for strategic forces, and that 30% of the $21 billion in remaining costs for tactical forces are fixed. Thus, divide $14.7 billion by 25 active duty air wings, for O&S costs of $588 million per wing.

O&S savings from converting 2 - 3 U.S.-deployed Army divisions to Reserve: $2.4 - $3.6 billion

Assume that the entire FY 1989 active duty Army O&S budget (roughly $46 billion) supports 18 divisions, and that 30% of these costs are fixed. Savings from eliminating two active duty divisions would therefore be $3.6 billion, and eliminating three would save $5.4 billion. Assume that the O&S budget for Army reserves (roughly $8.2 billion) supports 10 divisions, with 30% fixed costs. Adding two reserve divisions would therefore cost $1.2 billion, and adding three would cost $1.8 billion. Net savings would be between $2.4 billion and $3.6 billion.

O&S Savings from converting 30 U.S. tactical Air Force squadrons (10 wings) to reserve $1.3 - 4 billion

Using the assumptions above, cutting 10 active duty air wings would save between $2 billion and $6 billion annually. Assume that reserve forces cost one-third as much as active duty forces to operate and support (the ratio derived above for Army divisions).

ATACMS $1 - 1.5 billion

CBO, Alternatives for Improving NATO's Ground Forces (June 1988) shows purchases of 11,254 ATACMs between 1994 and 2008 at a cost of $17.55 billion in FY 1989 dollars. This averages out to $1.25 billion per year.

TOTAL $10.5 - 16.9 billion

POTENTIAL SAVINGS FROM ADDITIONAL FOREGONE MODERNIZATION

Initial calculations and assumptions:

Army procurement budget is $15 billion in FY 1989.

Air Force procurement budget is $31 billion in FY 89. Assume that roughly $11 billion is in the black (classified) budget, and that 25% of the remaining $20 billion is in strategic programs, satellite programs, and airlift and therefore not affected by the reductions. Thus, the portion o Air Force procurement used for these calculations is also $15 billion.

Assume that future procurement savings for equipment going from active forces to POMCUS sets are 85% of what would otherwise be expected, to allow for spare parts and for lower efficiency (hence greater per unit costs) resulting from reduced production rates.

Assume that future procurement savings for equipment going from active forces to reserves are 70% of what would otherwise be expectd, on the same basis as above, but also allowing for some equipment to be purchased expressly for the reserves. Assume that POMCUS and reserves will get the most modern equipment not needed by active duty forces.

1. Savings from withdrawing 100,000 Army troops. Two ways to calculate: 100,000 troops out of 772,000 = 13%. 0.13 (proportion of force) x $15 billion (procurement budget) x 0.85 (to account for the fixed costs)= $1.6 billion. Alternatively, 3 divisions of 18 = one-sixth, or 17%. 0.17 x $15 billion x 0.85 = $2.2 billion.
2. Savings from withdrawing 5 of 25 active tactical air wings. Assuming all procurement goes to active wings, and the reserves get the leftovers:
   0.2 (proportion of the force) x $15 billion (adjusted procurement budget) x 0.85 (to account for fixed costs) = $2.6 billion.
3. Savings from converting 2-3 U.S. deployed Army divisions to reserve. Assume 30% fixed costs. 2-3 divisions out of 18= one-ninth (11%) to one sixth (17%). If two divisions: 0.11 (proportion of force) x $15 billion (procurement budget) x 0.17 (to account for fixed costs) = $1.2 billion. If three divisions: 0.17 x $15 billion x 0.7 = $1.8 billion. Range of estimates = $1.2 - $1.8 billion.
4. Savings from converting 30 U.S. tactical Air Force squadrons to reserve. Assume 30% fixed costs. 30 squadrons =10 wings. 10 of 25 active wings = 40%. 0.4 (proportion of forces) x $15% billion (procurement budget) x 0.7 (to account for fixed costs)= $4.2 billion.

Summary of estimated modernization savings:

1. From withdrawing 100,000 Army troops:	$1.6 - $2.2 billion
2. From withdrawing 5 tactical air wings:	$2.6 billion
3. From converting 2-3 U.S. deployed Army divisions to reserve:	$1.2 - $1.8 billion
4. From converting 30 U.S. tactical Air Force squadrons to reserve:	$4.2 billion
TOTAL:	$9.6 - $10.8 billion

This estimate was prepared in March, 1989 by Gordon Adams, Alexis Cain, and Natalie Goldring of the Defense Budget Project, Washington, D. C.

Senator BIDEN. As usual, a very thoughtful statement.

It must be just amazing to you, of all people, to see what is happening now.

Mr. DEAN. It is a revolutionary development, really. And a very pleasing one—long overdue.

Senator BIDEN. Mr. Gaffney, welcome.

STATEMENT OF FRANK GAFFNEY, DIRECTOR, THE CENTER FOR SECURITY POLICY, WASHINGTON, DC

Mr. GAFFNEY. Mr. Chairman, thank you very much.

I am struck by your kindness in describing the business of our calendars. I in turn commend you for taking the time, particularly in my case, to hear perhaps a discordant voice on several of the issues that this hearing has attempted to address.

I would like to go back to your opening statement, if I may, which I think correctly put the proposition: Is the Bush administration—or are we as a nation—correctly grappling with the changes that we are seeing, particularly in the United States-Soviet relationship, but more broadly around the world?

Are we correctly identifying the initiatives and the direction that our policy should be pursuing? And in so doing, I would like, if I may, to ask your indulgence to address this a bit more broadly, rather than just narrowly in the defense and arms control area, because I think frankly it is a broader issue by far.

If I may, I would also like to have inserted in the record at the conclusion of my remarks not only my full statement but a paper that we have produced at the Center for Security Policy which has attempted to address an alternative national strategy review. This was, as you know, the exercise that the administration has been embarked on over the past 5 months. We have arrived at rather different conclusions than the administration on several points. I would like to address a couple of those here.

Senator BIDEN. Without objection, that will be done.

Mr. GAFFNEY. Thank you.

The first is, and in a way this comes back to what Jock was just talking about, too—the character of changes in the Soviet Union.

Our analysis has gone through, rather carefully, we think, each of the main areas in which the putative reforms in the Soviet Union are taking place, identifying in each, be they domestic politics, foreign policy, human rights, economic and financial affairs, military activities and arms control, and so on—those areas in which there have been changes, genuine, bona fide, noteworthy changes—and those areas where there has also been an underlying continuity to Soviet policy.

To be very brief about it—and this really does not do justice to the analysis—I think it is the case, and certainly our analysis reflects this, that the essential character of the Soviet Union that we have known over the past 70 years, abides.

We have not seen, in anything that Gorbachev has done to date, or even proposed, the kind of fundamental structural change that would, in a term we believe is the appropriate one, transform the Soviet Union either with respect to its political system, its ideological character, its economic system, or the allocation of resources

that it has made to date. As you know this allocation has been overwhelmingly for military purposes, and the promotion of Soviet external interests.

In that regard, I would like to just say a few words about what I think is a confusion about our policy interests. I believe our policy interests lie with changing the fundamental character of the Soviet Union, just as it does in bringing about democracy and freedom of choice, be it in economic terms or political terms, everywhere else around the world. I know that this committee has taken a keen interest in the promotion of such freedoms in many places around the world, and I think it is high time that we think of the longing evidenced in recent Soviet elections, in demonstrations in the Baltics and Tblisi and elsewhere—the Soviet people also share those same desires.

And in turn, we must think about how we might help bring that fundamental transformation of the system about. And I would submit, Mr. Chairman, that focusing on arms control, as even a very useful means to that end, let alone as the main focus of our efforts, is folly.

I say that because I believe that it is demonstrably the case that arms control has proven itself to be a very limited tool indeed. The poor record that it has thus far of genuinely altering—dare I say it—of improving the security of the United States should be one warning.

Another lies in the evidence of Soviet noncompliance, and the persistent, indeed worsening, problem—from my point of view—of verification.

I could go through for you very quickly my thoughts on several of the issues that you have touched upon here today, and if I could, I would like to do that and then come back to a sort of alternative approach.

In the strategic forces area, it seems to me that the value of the deep reductions agreement that Ambassadors Nitze and Kampelman and I and others have been working on over the years has been greatly oversold.

I think this is particularly true if it has the kind of verification problems that are almost certain to arise and if it is likely to result in even less credible, less robust, strategic forces as part of the U.S. deterrent force. And I think there are two ways in which that will happen.

One will be the likelihood there will be substantial reductions in our most survivable platforms—namely, the SSBN's, strategic submarines. And we will almost certainly see Soviet mobile ICBM's permitted. I would welcome a chance to discuss with you what I think we will likely get out of our current interest in Midgetman and rail mobile missiles and so on, but I think the bottom line is going to be a legitimization of a Soviet force that is optimized for circumvention of any limitations under START, that will go a long way toward nullifying the utility of such an agreement.

On the ABM Treaty, I could not more fundamentally disagree with what you have been told now, and what I think you believe yourself—that it is in our interest to strengthen the treaty, that denying ourselves the deployment option, let alone, as you have sug-

gested, making it even harder to test possible deployment options, would be in our interest.

I would submit to you that an SDI program in this country will be substantially more in our interest than the kinds of START agreement that you seem, and I think others are prepared to buy at the expense of SDI.

On the SNF issue, I was very much intimately involved as Deputy Assistant Secretary and then Assistant Secretary-designate in the Defense Department in the NATO deliberations about short-range nuclear forces—particularly concerning how we modernize in the aftermath of the INF Treaty. I had the privilege of chairing NATO's high-level group for 7 months or so, during which this was very actively in play.

And I can tell you we should be under no illusions, but that the kinds of problems that now argue for an entry into these negotiations—namely, the political pressure—will disappear, or become more tractable, once we are into the negotiations and we are finding ourselves explaining why the number of launchers we have now, 88 or so, is an adequate or inadequate level.

Senator BIDEN. I apologize.

I am so tied up in your statement, listening to you, that I did not realize there is a vote, and I only have about 4 minutes left to vote.

I apologize. I am going to run.

Mr. GAFFNEY. I will remember where I was.

Senator BIDEN. Please do, because I will remember where you were.

It is seldom that a witness speaks and I do not even hear the bells, I was listening so.

Mr. GAFFNEY. I am flattered, sir. Thank you.

Senator BIDEN. I will be back in a moment.

[A brief recess was taken.]

Senator BIDEN. I believe you left off at the word "the"?

Mr. GAFFNEY. It was "the," yes, sir. And the word that came after it was—my own view is that the necessity for a continuing in-theater nuclear capability will persist, even if we have eliminated the disparity between United States, NATO, and Soviet Warsaw Pact forces that exists today.

You mentioned the historical genesis of the nuclear dimension to our deterrent policy, and I think it is true that we did, in fact, approach it from the standpoint of compensating for gross conventional disparities. But as with so many other things, there has been an evolution in NATO thinking over time, and one thing that I would argue is more firmly true than ever before—an appreciation that conventional wars can happen, even when people have inferior forces, the aggressor has inferior forces. And deterrence through a nuclear means, I think——

Senator BIDEN. History showed that.

Mr. GAFFNEY [continuing]. Continues to be a player.

I have to tell you that I found absolutely remarkable this inquiry into the legal basis upon which Shevardnadze may or may not have thought that he could say, "We're going to pull the plug on the INF Treaty." I heartily endorse the letter that you all have sent, from what I have heard of it, but I think to be perfectly honest, the Soviets reverted to form.

It is good, old-fashioned Soviet hardball, aimed at intimidating NATO. And it is one of the reasons why I believe you have got to think hard about how much has really changed in the character of the place, the institutions, the people who run it.

Turning very quickly—and this is a very superficial treatment of a number of these things, but I do just want to cover them all, if I can—on the chemical warfare talks, my own view is that the emperor has absolutely no clothes, with respect to the President's commitment to get a global verifiable ban on chemical weapons.

I think we all wish it were otherwise, but I have not yet found anyone, either in my time in Government or subsequent to my departure, who is technically competent in this field, who believes there is a snowball's chance in hell of having global verifiable elimination of all chemical weapons.

I happen to have had a recent opportunity to address this at length with the Governmental Affairs Committee, and I would be happy to share my testimony with the committee, if it would be of interest.

But it is a nonstarter, and what I think will happen is precisely what happened in the biological warfare area, if we go down this road; namely, we will find ourselves neither in a position to have offensive chemical deterrence nor credible defensive gear. As there is no threat, why invest the money? There are other things that the money needs to go to—and so on.

On nuclear testing, Mr. Chairman, I fundamentally disagree with, I think, the majority view of this committee that additional testing limitations are in our interest. I think to the contrary, they are incompatible with the maintenance of the credible nuclear deterrent force.

And while I think this administration will try very hard to get additional limitations of some kind or another, I fear that all of the talk that we are engaging in—will START leave us with survivable forces, will SNF negotiations, if they occur, permit us to have a credible in-theater force, et cetera, et cetera—become academic, if we have taken the kind of technical steps that reduce our confidence in, the reliability, and the flexibility in the future, of our nuclear forces.

Finally, a very passing shot on conventional forces arms control. This is a quagmire, as arms control negotiations go, without parallel. I was comparing notes with Jock during the break, and I have got to tell you, I think the MBFR talks are going to look like an orderly, straightforward negotiating proposition, compared to what is at work now in Vienna.

Senator BIDEN. They were. The Soviets did not want to talk.

Mr. GAFFNEY. They did not want to talk, and many regard that as an excellent outcome.

But the bottom line is, no matter what we do with the cast of characters involved with the negotiations—I think it very problematic indeed that we will arrive at a negotiated outcome that both—meets our immediate security interests and is capable of overcoming the fundamental and immutable geographic asymmetries between the two sides, preserves our ability rapidly to respond to warnings and indicators of a Soviet attack, and facilitates making decisions about doing so.

Having spent as much time as you have in NATO, I think you appreciate just how problematic correctly interpreting ambiguous warnings and indicators can be under the best of circumstances.

With that toward the horizon of the arms control problems I think we face, which I hope we can come back to, can I just suggest an alternative approach, which is laid out in somewhat greater length in our paper?

And that is developing a coherent policy toward the Soviet Union using more attractive and, I think, more effective means of bringing about the kind of fundamental transformation we should be striving for there.

Those are, principally, in my view, using economic, financial, and technology security initiatives to advance our objectives. Again, these are developed at considerable length in the paper, and I would only highlight a couple of points.

I think the Bush administration is using the right sort of rhetoric in talking about the need for change, and conditional help provided certain things take place in the Soviet Union.

I am afraid that thus far with one promising exception, which just occurred this week, we have seen precious little evidence that the policies, the policy initiatives that the administration is pursuing conform to that conditional and very highly leveraged rhetoric.

The very important exception that I would call to your attention is Secretary of Commerce Mosbacher's statement before a most unappreciative audience this week—the United States-U.S.S.R. Trade and Economic Council. They were entirely unhappy with his comments about the need for discipline and transparency and for care in the export of sophisticated technology to the Soviet Union, and the requirement for fundamental change there, if we are to see an improvement over time in our relationship with them.

Those are nonetheless, I think, the kinds of principles—not an exhaustive list, by any means—but the kinds of principles that the Secretary laid out that should, in fact, underpin an offensive, aggressive, innovative—not responsive, reactive, or paralyzed—United States policy toward the Soviet Union.

I think they have the potential, if applied along the lines that we have suggested in our alternative national strategy review—to bring about a genuine diminution of the threat the Soviet Union poses to the United States today far better than the kinds of arms control arrangements that have been discussed by me and others this afternoon.

Thank you.

[The prepared statement and an addendum of Mr. Gaffney follow:]

PREPARED STATEMENT OF FRANK J. GAFFNEY, JR.

Mr. Chairman, Members of the Committee, it is a distinct privilege to address with you some of the most important issues of our time, namely the future course of U.S.-Soviet relations. This is especially true insofar as you have provided me the opportunity to do so in the company of two distinguished former colleagues and authorities in the field, Ambassadors Paul Nitze and Max Kampleman.

I believe it is no longer possible -- and certainly not constructive -- to consider the security dimension of our relationship with the Soviet Union exclusively from the standpoint of relative military forces or arms control. Accordingly, while my remarks will address throughout the implications of change in the USSR and our policy toward that country for our defense interests, I will do so in a larger context.

Specifically, I would like to discuss with you some of the thinking my associates at the Center for Security Policy and I have done in recent weeks on the opportunity now present to transform the Soviet Union and the threat it continues to pose to our vital interests. In so doing, I will draw upon a recent Center analysis entitled **An Alternative "National Strategy Review"** which I would ask to have inserted in the record in its entirety at the conclusion of my remarks.

The Context

We believe one cannot properly assess contemporary events in the USSR -- or chart a suitable course for our relations with that country -- unless we are mindful of the larger context. As members of this Committee are well aware there is around the globe today a seemingly irrepressible demand for the rule of law to replace that of dictators; for basic human freedoms to be protected, not trampled, by those who govern; and for free choice in economic as well as political matters.

This demand is giving rise to powerful popular forces -- forces that are seeking and, with varying degrees of success, achieving dramatic changes throughout the non-democratic world. The result has been the creation, from Chile to China, of a highly dynamic international environment replete with exciting new opportunities, and potential perils, for the United States and other Western powers.

Nowhere are the manifestations of this phenomenon producing greater opportunities -- and more serious potential perils -- for Western security than in Soviet Union. The USSR has not been immune to the popular demand for change; in fact, under the current Soviet policy of glasnost, there has been more evidence of the deep-seated dissatisfaction of the Soviet people with the ruling communist regime and their lot in life than at any time since the 1917 Russian Revolution.

What is Gorbachev's Response?

A central question for contemporary Western security policy is: How will the Soviet leadership respond to this phenomenon? Does it recognize that the growing evidence of failure on the part of totalitarian communism's political and economic systems can only be addressed by radical change in both?

To the extent that the regime of Mikhail Gorbachev really accepts this reality and is willing to effect a fundamental transformation of its political, economic, and military

structures, there is the possibility of genuine reform in the Soviet Union that can substantially alter the threat posed by that nation and its allies to the West.

On the other hand, if -- as has been the case in the past -- the Soviet regime remains unwilling to cede real power and determined to prevent fundamental systemic change, its current, highly publicized efforts at "reform" may amount to nothing more than temporizing measures, calculated to stave off rather than effect the necessary transformation. Under such circumstances, undisciplined Western economic and financial assistance to Gorbachev could reduce, not increase, the prospects for democracy, private enterprise and liberty in the Soviet Union. The result could also be to improve the USSR's present, prodigious capacity to threaten American interests and those of its allies.

U.S. Policy at a Crossroads

Recent events suggest that the Bush Administration has adopted a bifurcated -- if not schizophrenic -- policy. On the one hand, much of the Administration's rhetoric reflects a healthy, and justified, skepticism about the genuineness of the Soviet government's commitment to systemic reform (e.g., Deputy National Security Advisor Robert Gates, who wrote on April 30th, "We can hope for such change, but all of Russian and Soviet history tells us to be skeptical and cautious").

On the other, to the extent they have been spelled out, the Bush Administration's policy initiatives toward the Soviet Union and its empire seem predicated on the belief that the USSR under Mikhail Gorbachev is committed to a course that will radically transform the character of the Soviet political, economic and military systems. With apologies to Teddy Roosevelt, the five month-long "National Strategy Review" (NSR) -- ordered by President Bush, among other things, to assess U.S.-Soviet relations -- has evidently concluded that, as long as one speaks cautiously, one can sell the Soviets the West's "big stick." For example, the Administration has: encouraged joint business ventures financed by Western capital like those of the American Trade Consortium; approved a new, taxpayer-subsidized wheat deal for the USSR (at a time of serious wheat shortfalls in the United States); proposed a major economic package for Poland; indicated an imminent easing of restrictions on the transfer of advanced, militarily relevant technologies to the Soviet bloc; and invited the USSR to become further integrated into the world economy.

An Alternative Assessment of Gorbachev's Agenda

We at the Center for Security Policy believe a rather different assessment of the character and objectives of Soviet "reform" policies under Gorbachev is in order. Our Alternative "NSR" provides considerable evidence that the Gorbachev program does not, in fact, represent a commitment to the kind of fundamental transformation of the Soviet system that would radically alter the character of the threat it continues to pose to the West.

Permit me to highlight a few of the Center's findings before turning to a more in-depth look at the military and arms control aspects of Gorbachev's agenda:

Domestic Politics: Such liberalization as is occurring is taking place firmly within the existing, totalitarian political system. All of the levers of power remain in the hands of the regime. There has been no change in the ability of the population to influence basic decisions that affect its future

well-being. For all their novelty, the March 1989 elections did not alter this reality.

Foreign Affairs: The highly publicized changes in Soviet foreign policy, including their flagship -- the withdrawal of troops from Afghanistan -- is typical of Gorbachev's apparent, wholesale adaptation in foreign affairs of the Leninist doctrine of "reculer pour mieux sauter," tactical retreat in order to advance strategic objectives. Evidence of assiduous Soviet exploitation of divisions within the Western alliance (notably those relating to its defense) is particularly troubling in this regard.

Human Rights: While there have been numerous improvements made in the treatment of Soviet citizens by their government, the Gorbachev regime has made no move to change the legal relationship between the two. In particular, no firm basis for the exercise of political and human rights has been created; the Soviet Union has granted somewhat greater permission for individuals to emigrate, dissent, worship, and possess property but not entitled them to the right to do so.

Economic Policy: Just as political liberalization of the Soviet Union is intended to take place within the context of the existing structure, the economic reforms being introduced are designed to decentralize and introduce private enterprise only within politically controllable parameters. Optimism about the effect of economic reforms in the Soviet Union is, therefore, unwarranted.

Military Affairs and Arms Control: Let me turn now to a few remarks about the area of Gorbachev's "reforms" that has most dramatically affected Western attitudes about, and support for, his regime. Remarkably, this is the area in which the least material change has taken place to date. Consider the following:

Arms Control

The Soviet Union has been found by the U.S. government to have engaged -- under Gorbachev's regime and those of his predecessors -- in a pattern of violations of major arms control agreements. These include the ABM Treaty, the Limited Test Ban Treaty and chemical weapons conventions as well as other international agreements such as the Helsinki Final Act. And yet, even as it proceeds with such violations of existing agreements and sustains a relentless military buildup (N.B. the United States is in its fifth consecutive year of declining defense investment), the Soviet Union is promoting a bewildering array of arms control proposals. These include proposals affecting forces and activities involving nuclear, conventional, and chemical arms and strategic defenses.

Such Soviet proposals appear to make major concessions in several areas, notably in their acceptance of the principles of on-site verification and asymmetric reductions. A number of the suggested agreements, however, involve limitations (e.g., those on mobile intercontinental ballistic missiles) and bans (e.g., chemical, anti-satellite and nuclear testing) that simply cannot be verified effectively. The Soviet-proposed asymmetric reductions become far less impressive when one notes (as in the INF Treaty) that other new Soviet systems being deployed (e.g., the SS-24 and SS-25 mobile ICBMs) can readily fulfill the missions of the forces being reduced. What is more, given the intractable verification problems associated with monitoring some of the forces to be reduced, it is impossible to have great confidence that the promised benefits of such agreements will actually be realized.

It should be noted that, simply by tabling their proposals, and without having to effect actual reductions in their military spending or their weapons production, the Soviets have already had considerable successes under Gorbachev in interfering with U.S. and NATO defense programs. For example, even though Soviet violations have long ago broken the ABM Treaty, Soviet arms control proposals and diplomatic pressures have succeeded in encouraging restrictions on U.S. strategic defense activities by claiming the need to preserve the Treaty. Similarly, following the INF Treaty, the Soviets have pushed hard to build public support in the West for delaying -- if not preventing -- important NATO modernization programs.

Defense Budget

The West has been particularly dazzled by Gorbachev's announced intention to effect dramatic, unilateral reductions in the size and character of the Soviet military. His stated intention to remove 500,000 men and 10,000 tanks from Eastern Europe is frequently treated as an accomplished fact -- one which has already reduced the threat to the West. What is more, this action has been widely viewed as obligating allied nations to respond in kind by making their own dramatic and unilateral budget cuts and/or exercising restraint in vital weapons modernization programs.

In reality, there is no evidence that the USSR has yet embarked upon the kind of massive reallocation of resources away from the bloated military sector to the starving civilian economy promised by perestroika. Totalitarian communism remains the only system capable of sustaining peacetime military expenditures on the order of 20-25% of Gross National Product. The cost of doing so is real and clearly contributes greatly to the incalculable hardship inflicted daily on Soviet citizens. For example, the magnitude of the loss of life caused by the recent earthquake in Armenia was in large measure attributable to the fact that civilian construction in the USSR is systematically denied the steel prudent building techniques require in such a seismically active region. At the same time, there is no such shortage when it comes to the construction of tanks which continue to be produced at a rate of over 3,500 per year.

There are reports that military factories have been ordered to produce civilian goods -- but only in addition to meeting their planned production for the armed forces. One can detect no indications in Soviet stores that military production has actually been diverted. To the contrary, if anything, the unavailability of basic consumer goods is worse than ever. Butter, meat and even soap are rationed all over the country -- an astonishing indictment of the deplorable living standards in a nation that prides itself on being a global superpower.

Interestingly, when Khrushchev made his own reductions in the Soviet military (cuts that were vastly larger than those announced by Gorbachev), former army officers became available to the civilian employment market; there was similarly a boom in the civilian housing market and a noticeable increase in consumer goods. None of these manifestations of true resource reallocation are noticeable thus far as a result of Gorbachev's announced defense reductions.

Military Glasnost

As noted above in connection with the Soviet Union's current stance on verification of arms control agreements -- namely its apparent commitment to intrusive on-site inspection -- the Soviet military has been at pains to appear less secretive than in the past. Visits for Western dignitaries to inspect military

installations and modern armaments, exchanges between senior students at military academies and candid accounts of the shortcomings of Soviet armed forces in Afghanistan -- all convey an impression of unprecedented openness, seemingly incompatible with hostile intent or threatening capabilities.

In fact, the Soviet military remains secretive and fully capable of holding vital Western security interests at risk. Its budget continues to be a closely held secret -- making it impossible to assess the implementation of Gorbachev's commitment to reduce defense spending by 14 percent. Publications released in 1989 for the ideological training of the armed forces contrast sharply with the official rhetoric about the adoption of a "defensive defense" strategy and the end of the adversarial relationship with the United States. Programs, including the use of outright deception, aimed at concealing the character and magnitude of Soviet weapons programs continue apace. What is more, the USSR's espionage, thefts of Western technology and subversive activities -- and those of Soviet proxies -- show no signs of slackening.

The principal result of Soviet military "reform" efforts to date appears instead to be that Western governments, media and publics have become convinced that the threat posed by the USSR's armed forces is diminished when, in actuality, little has changed in the Soviet ability to threaten the West's strategic interests. This perception has had several practical and beneficial effects for the Soviet national security apparatus: First, it has greatly attenuated support for Western military preparedness, providing "a breathing space" (peredyshka) vitally needed if the Soviet Union is to restore a favorable correlation of forces.

Second -- and closely related to the first -- is the opportunity such a changed perception affords for access to Western high technology. As the West's guard has dropped, sensitivity about selling militarily-relevant equipment and manufacturing know-how to the USSR has also given way to a feverish competition to sell the Soviet Union virtually whatever it wishes to buy, often on excessively generous credit terms to boot.

Third, Soviet efforts to penetrate American and other advanced countries' industries and institutions for intelligence collection and other purposes has grown markedly. A senior French official recently estimated that such activities had grown four-fold during Gorbachev's tenure. The Director of the Central Intelligence Agency, William Webster, remarked in a similar vein on the growing challenge to U.S. counter-espionage capabilities by Soviet military and KGB operations under Gorbachev.

An Alternative Approach to U.S.-Soviet Relations

It is against this backdrop that American policy toward the Soviet Union must be developed. We ignore at our peril the Soviet leadership's commitment to preserve the USSR's political and economic systems, even though the efforts to make such systems more efficient -- even, to some extent, more humane -- will be lauded in certain quarters.

Historically, the best guarantor of peace is democracy, since democracies do not use arms to wage war on each other. Wherever a government of checks and balances subject to the popular will -- as opposed to the dictates of undemocratic regimes -- has determined the allocation of national resources and the direction of foreign policy, military forces are maintained at modest levels and the peace is not threatened by territorial or ideological ambitions.

In contrast, where it has held sway, totalitarian communism has given rise to powerful military establishments vastly in excess of legitimate national defense requirements and with a propensity to employ arms in pursuit of aggressive foreign policy ends. Such capabilities concentrated in the hands of undemocratic regimes pose the only real threat to the physical security of the United States and its allies.

Accordingly, it is in the interest of the United States to encourage fully the growing, worldwide movement toward self-governance -- the institutionalization of human rights and legally protected freedoms and the growth of free enterprise. This principle should above all govern U.S. policy toward the Soviet Union. Nothing could do more to reduce the Soviet military threat to our interests than would its rigorous implementation.

Toward this end, we recommend in the Alternative "National Strategy Review" a different approach to U.S.-Soviet relations. In contrast to a strategy that principally entails subsidizing and otherwise propping up Gorbachev and his vision of perestroika, this strategy would involve seizing the historical initiative by applying available Western resources and leverage so as to transform the totalitarian Soviet system. The concept behind such a strategy would be to make such assistance available to the Soviet bloc in ways and on terms designed to produce maximum structural change in the Soviet bloc.

While sensible Western military and arms control postures will play an essential role in the implementation of this approach, so will a host of other policies, many of which have not previously been treated as important tools for advancing national security interests. Notably, this strategy will require Western governments and companies to work concertedly with private, non-communist groups in the Soviet Union and the East bloc (not simply the ruling regimes' leaders) with a view to stimulating and supporting forces that will inevitably lead to new economic and political structures, and hence a greatly diminished military threat.

Such a conditioned approach to Western assistance to the Soviet Union and East bloc, like a step-by-step loan disbursement arrangements predicated on Moscow's performance toward publicly identified economic and political milestones, will not be unduly onerous if the Soviets are genuinely interested in promoting non-strategic commercial activity and similar developments within the civilian economy. On the other hand, if the Soviets and their allies really have an ulterior motive in mind -- not the salvation of their economies and countries through radical structural reform but the shoring up of the existing regimes and the preservation of their threatening military establishments -- such an arrangement would be a "show-stopper." In the latter case, however, the West would presumably not be interested in helping bring about such an outcome anyway.

The main elements of a new initiative, aimed at "helping" democracy in the USSR and not just Gorbachev would include the following:

Economic Policy

The economic and financial crises confronting the Soviet bloc offers the West unprecedented opportunities to stimulate genuine economic and political reform with palpable benefits for American security and other interests. There are numerous ways in which constructive leverage can be brought to bear:

Financial Tools

The two key elements in Western official and commercial bank lending to the USSR, Eastern Europe and other Soviet client states must be greater discipline and transparency. Regrettably, this is certainly not the case today. All loans should be tied to specific projects or trade transactions through the use of established lending techniques and expanded reporting requirements. Untied, "general purpose" loans only serve to postpone the need for tough resource allocation decisions and provide greater flexibility to divert the proceeds of Western loans to finance activities potentially inimical to vital Western security interests.

Continuing present, undisciplined lending practices increases the likelihood of deepening the East bloc's debt crisis and recruiting new victims -- possibly even the USSR itself. Adding this burden to those already imposed on American taxpayers by the international debt crisis, the U.S. savings and loan industry, and potentially precarious leveraged buy-outs, would represent intolerable budgetary strains during this period of austerity.

The conditions for any Western lending (either direct or guaranteed) to the Soviet bloc should be:

- Massive privatization of the Soviet bloc economies, including key heavy industries and agriculture;

- The systematic reallocation of priority resources away from the military sectors to the destitute civilian economies; an important and visible feature of this reallocation process would be the conversion of extensive military infrastructure to civilian production -- particularly weapons production dedicated to supplying Soviet end-users;

- Sharp reductions in the size of the bloated government bureaucracies and the expensive privileges enjoyed exclusively by the nomenklatura -- as opposed to reducing further the living standards of ordinary citizens.

If and when Soviet bloc authorities demonstrate the political will to implement such market-oriented reforms, the alliance should publicly agree on specific goals -- and specific milestones for achieving these goals -- upon which all disbursements of funds from various sources (e.g., bilateral and multilateral government loans and credit lines, IMF disbursements, commercial bank credits, World Bank co-financing, etc.) will be made contingent.

Trade

Expanded flows of technology with dual-use applications to the Soviet bloc should be predicated upon the end of a military threat to Western interests from this quarter. Otherwise, such transfers simply constitute a subsidy to the West's adversaries potentially worth billions of dollars in avoided research and development costs and enhanced military capabilities. This circumstance, in turn, is costing the American people billions of dollars annually in the form of additional defense spending to counter the consequences of Soviet technology theft. To the extent there is such trade, the emphasis should be on the sale of end-products, as opposed to turn-key manufacturing and processing capabilities.

Moreover, trade should emphasize the creation of private enterprise in the Soviet bloc; accordingly, Western businesses should seek to work with non-governmental entities in the Soviet

Union and Eastern Europe. Similarly, principles like those developed by Alexander Slepak should be observed by any Western company operating within the Soviet bloc in the interest of advancing human rights (much as the Sullivan principles seek to advance greater equality and human rights in South Africa). I heartily endorse the initiative of Senators John Heinz and Dennis DeConcini (as well as 22 cosponsors in the House) aimed at giving the Slepak principles legal standing.

The Mosbacher Principles

It is noteworthy that we have just seen one encouraging indication that, in this area at least, the Bush Administration intends to bring its policies toward the Soviet Union into line with its rhetoric. I am referring to Commerce Secretary Robert Mosbacher's enunciation of five general principles quite consistent with the approach I have just outlined. Their announcement as Administration policy was all the more dramatic, coming as it did in the course of a speech Tuesday before an organization utterly hostile to such prudent U.S. policies -- the U.S.-USSR Trade and Economic Council (USTEC).

These sound Mosbacher principles are: (1) When it comes to trade and export controls, U.S. national security needs will remain paramount. (2) The United States will not engage in a subsidized credit war to force an unhealthy growth of East-West trade which would be inconsistent with economic realities. (3) Joint ventures can play a role in the development of U.S.-Soviet trade relations, but investment decisions should be made on a strictly commercial basis. (4) Our willingness to make fundamental improvements in trade remains related to progress in human rights and emigration. And (5) For economic relations to increase, the Soviet Union must become more open (i.e., greater transparency). The Mosbacher principles provide a much-needed road map to establish clearly defined milestones against which Soviet behavior can be judged and appropriate steps by the West calibrated.

In the context of U.S. national security interests, two points addressed in Secretary Mosbacher's remarks seem to me to warrant special emphasis. First, at a time of shrinking resources available for national defense, it is insane for the West to be dismantling its existing mechanisms, namely COCOM's "no-exceptions" policy, for controlling the flow of technologies to the USSR. This is especially true with respect to the hemorrhage of technologies well suited to military applications and that will certainly be supplied to the East in the absence of such a mechanism. Such transfers will simply exacerbate the security problems attending already inadequate defense spending. We at the Center welcome Mr. Mosbacher's statement that "We will never trade security for profits. The export controls which we and our allies must have in place for our national security are not and cannot be on the table for negotiations." Abandoning the "no-exceptions" policy would certainly contravene the principles espoused by Secretary Mosbacher.

Second, we also applaud Secretary Mosbacher's statement that the United States will not engage in a subsidized credit war with our allies favoring Moscow. Any direct government loans to the Soviet Union or credit guarantees (such as the $5 billion in government-guaranteed credits provided last fall by European nations to Moscow) are subsidies. This point was made forcefully a few months ago by your colleague, Senator Bill Bradley. He said:

> Why are these government guarantees important? First, they are just like any other subsidy. Because the financing is backed by the full faith and credit of the lender's

government, the borrower gets better terms. Second, they insulate lenders from the full extent of the risk of doing business in the USSR and pass that risk onto the taxpayers. Third, the data on the extent and magnitude of insurance and guarantees is quite sketchy. Western governments are apparently reluctant to let voters and taxpayers know just what good deals the Soviets are getting.

Such Western subsidies have adverse and unavoidable security implications. They augment Soviet resources and permit the USSR to avoid the hard choices its dire economic straits would otherwise entail. This is particularly true to the extent that such resources are not tied or otherwise conditioned. For this reason, we at the Center agree with Senator Bradley and many other Senators that government-guaranteed and direct credits, are subsidies which must be eliminated multilaterally. We urge Members of this distinguished Committee to impress upon the Administration once again the necessity of working toward allied agreement in this specific related areas at the upcoming NATO and Paris economic summits.

Military Posture and Arms Control

In addition to such steps which will, if adopted, will serve to underpin our national security, these should be complemented by other measures more traditionally associated with prudent defense policies.

First, the continued investment by the West in highly capable deterrent forces is necessary to ensure that no military advantage accrues to the USSR and its allies as a result of the latter simply adopting the rhetoric of restraint. Under such circumstances, the Soviets would be foolish actually to reduce the high priority presently given to the military. In particular, U.S. investment in such highly leveraged technologies as those involved in the Strategic Defense Initiative and "Stealth" programs can greatly diminish the value of major Soviet military investments (e.g., those in ballistic missiles and air defenses) and provide powerful incentives to the USSR to deemphasize outlays for weapons and related hardware.

Second, in the event the Soviet Union does not reorder its traditional priorities, as Secretary of Defense Dick Cheney has predicted, and the West is obliged to contend once more with the full panoply of expansionist Soviet ambitions, the United States and its allies will be far better able to do so if they have kept their guard up in the meantime. The central elements of such a deterrent posture would be modern nuclear arms and deployed strategic defenses; these must be accompanied by a revised approach to the negotiation of strategic arms reductions and a real policy for dealing with Soviet non-compliance. A detailed description of a package of strategic force modernization and arms control initiatives recommended by the Center for Security Policy can be found in its recently released paper, "An Assessment of Future Requirements for U.S. Strategic Forces and Strategic Arms Control," which in the interest of time I will not summarize here but simply ask to have it inserted in the record.

In the Center's Alternative "National Strategy Review" we identify specific actions that should also be taken in several other areas, i.e., human rights, regional policy, public information and leadership, etc. I will only highlight one of particular relevance to your responsibilities -- the need for reliable intelligence.

Sound Intelligence

In times of uncertainty and change, policy-makers are particularly dependent upon effective intelligence collection and

analysis, which must seek to identify threats to American security as well as opportunities to advance U.S. interests. Fast-moving events in the Soviet Union make the demands upon U.S. intelligence extraordinarily severe, particularly in light of continuing Soviet denial and deception practices. Moreover, when -- as at present -- American policies are being reconsidered in light of assessed changes in the threat, the potential is high for the objectivity of the analysis to be compromised in order to justify certain policy approaches.

Under such circumstances, it is vital for the integrity of the intelligence process that competitive, "opportunities-oriented" analysis be institutionalized. Accordingly, we believe the Bush Administration should immediately reconstitute the President's Foreign Intelligence Advisory Board (PFIAB), a senior-level panel that plays a crucial quality-control role for the U.S. intelligence community by reviewing and, where necessary, second-guessing the quality of its judgments.

What is more, the approach utilized in 1976 by then-CIA Director George Bush to challenge the assumptions and analysis of the official estimates of Soviet military activities should be institutionalized. With hindsight, it is apparent that this so-called "Team B" proved more accurate than its official counterparts when it came to projecting the character of Soviet policy and programmatic activities in the heyday of the 1970's detente. Should such a competitive approach be pursued henceforth, the result will be to invigorate and improve the quality of formal intelligence community estimates and their usefulness to policy-makers and to help insulate such analyses from undue political influence aimed at eliciting a desired answer. I hope the Committee will actively encourage these initiatives.

Conclusion:

In conclusion, this is no time for a passive, reactive or paralyzed American foreign policy. Now more than ever, U.S. initiative and leadership are required if the West is to define Gorbachev's success in terms consistent with democratic interests -- rather than his own. Both will be required in quantity if the present impulse to accede to Gorbachev's efforts aimed at sowing discord within the Western alliance and obtaining massive economic, financial and technology bail-outs is to be resisted and the conditions for lasting peace and prosperity created.

Now -- as the West is faced with the tantalizing prospect of triumphing over the ideals, values and institutions long associated with communist totalitarianism -- is not the time to shrink from the challenge. Instead, the United States and its allies must seize this momentous opportunity to press their considerable advantages toward the end of enabling the peoples of the Soviet Union and other nations of the East bloc to express and fulfill the same basic aspiration increasingly evidenced elsewhere: the right to live in a society of laws made by a free citizenry.

If the policy prescriptions I have described here are implemented, the United States may come to know a more certain security and the world to realize an era of peace and prosperity without historical precedent. We at the Center for Security Policy believe the choice is, to a remarkable degree, ours to make. I hope this testimony will be helpful to you and your colleagues in playing the important role you must in such a choice.

AN ALTERNATIVE "NATIONAL STRATEGY REVIEW"

DESIGNING AN EFFECTIVE POLICY FOR U.S.-SOVIET RELATIONS: "HELPING GORBACHEV SUCCEED" OR TRANSFORMING THE USSR?

INTRODUCTION

Around the globe today, there is a seemingly irrepressible demand for the rule of law to replace that of dictators; for basic human freedoms to be protected, not trampled, by those who govern; for free choice in economic as well as political matters. This dynamic revolution of expectations is one whose genesis Americans can proudly trace to the founding of their own republic. Indeed, the Declaration of Independence serves as a model -- actual or implied -- for many of those who do not now enjoy the inalienable rights to which the United States believes all people are entitled.

This demand is giving rise to powerful popular forces -- forces that are seeking and, with varying degrees of success, achieving dramatic changes throughout the non-democratic world. The result has been the creation, from Chile to China, of a highly dynamic international environment replete with exciting new opportunities, and potential perils, for the United States and other Western powers.

Nowhere are the manifestations of this phenomenon producing greater opportunities -- and more serious potential perils -- for Western security than in Soviet Union. The USSR has not been immune to the popular demand for change; in fact, under the current Soviet policy of glasnost, there has been more evidence of the deep-seated dissatisfaction of the Soviet people with the ruling communist regime and their lot in life than at any time since the Russian Revolution.

A central question for contemporary Western security policy is: **How will the Soviet leadership respond to this phenomenon?** Does it recognize that the growing evidence of failure on the part of totalitarian communism's political and economic systems can only be addressed by radical change in both?

To the extent that the regime of Mikhail Gorbachev really accepts this reality and is willing to effect a fundamental transformation of its political, economic, and military structures, there is the possibility of genuine reform in the Soviet Union that can substantially alter the threat posed by that nation and its allies to the West.

On the other hand, if -- as has been the case in the past -- the Soviet regime remains unwilling to cede real power and determined to prevent fundamental structural change, its current, highly publicized efforts at "reform" may amount to nothing more than temporizing measures, calculated to stave off rather than effect the necessary transformation. Under such circumstances, undisciplined Western assistance to Gorbachev could reduce, not increase, the prospects for democracy, private enterprise and liberty in the Soviet Union. The result could also be to improve the USSR's present, prodigious capacity to threaten American interests and those of its allies.

Recent events suggest that the Bush Administration has, on balance, concluded that the Soviet Union under Mikhail Gorbachev is committed to the former path. Despite some officials' obvious concerns about Gorbachev's program of reforms known as perestroika (notably those of Defense Secretary Richard Cheney

who said on April 29, 1989, "I would guess that he would ultimately fail" and of Deputy National Security Advisor Robert Gates who wrote on April 30th, "We can hope for such change, but all of Russian and Soviet history tells us to be skeptical and cautious"), President Bush announced on May 1, 1989 that "I made clear to Mr. Gorbachev...we wanted to see perestroika succeed."

Given this indication of presidential commitment to the success of Gorbachev's program, taken together with a number of recent actions by the Administration (e.g., the encouragement of joint business ventures financed by Western capital, a new subsidized deal for wheat to the Soviet Union, a major economic package for Poland, and evident interest in easing restrictions on transfer of high technologies to the Soviet bloc), the United States appears poised to adopt a policy designed to "help Gorbachev." It would seem that the five month-long "National Strategy Review" (NSR) -- ordered by President Bush, among other things, to assess U.S.-Soviet relations -- has concluded that such an approach is both warranted and advisable.

In the interest of facilitating an informed debate on this momentous policy decision, the Center for Security Policy has prepared an Alternative "National Strategy Review." It offers a rather different analysis of the character and objectives of Soviet "reform" policies under Gorbachev. It is the product of intensive collaboration by members of the Center's Board of Advisors and other associates, individuals who are specialists in international relations and economics and national security affairs. Many of them have first-hand experience in security policy-making positions in previous administrations and on Capitol Hill; they bring a wealth of valuable insight and expertise to the task.

THE GLOBAL DEMAND FOR FREEDOM

It is one of the most striking developments of the contemporary international environment that the principles upon which the United States was founded are taking root all over the world. In nation after nation, peoples long oppressed by totalitarian regimes of the right and the left have successfully demanded basic liberties. Notably, democracies are supplanting dictatorships in Latin America, the Philippines, South Korea, Taiwan and elsewhere.

The burgeoning demands being heard the world over for greater personal freedoms and self-government reflect the triumph of American ideals and the irresistible attractiveness of productive modern market economies. To some extent, the United States can take credit for promoting these developments. At the very least, its stable, popularly elected government and prosperous economy stand in stark contrast to the performance of other systems. Such institutions and the values they reflect have served as a model for untold millions in designing and realizing systemic changes in their own national economic and political structures. U.S. security guarantees, diplomatic pressure and economic leverage have, where applied, also contributed to these positive developments.

In some places, however, the emergence of such popular demands has been less clearly a function of American initiative or leadership. Particularly striking in this regard are the popular demonstrations now erupting in Eastern Europe, China and within the Soviet Union itself. Such events show vividly that the human aspiration for liberty persists, even where regimes have sought for decades through indoctrination, terror and other means to deny their subjects fundamental rights.

U.S. INTERESTS IN THE GLOBAL EMERGENCE OF FREEDOM

The United States' traditional commitment to nurturing liberty beyond its borders is not only a worthy and altruistic policy. It is also a prudent concept for enhancing the security of the United States and that of the Western world. Historically, the best guarantor of peace is democracy, since democracies do not use arms to wage war on each other. Wherever a government of checks and balances subject to the popular will -- as opposed to the dictates of undemocratic regimes -- has determined the allocation of national resources and the direction of foreign policy, military forces are maintained at modest levels and the peace is not threatened by territorial or ideological ambitions.

In contrast, where it has held sway, totalitarian communism has given rise to powerful military establishments vastly in excess of legitimate national defense requirements and with a propensity to employ arms in pursuit of aggressive foreign policy ends. Such capabilities concentrated in the hands of undemocratic regimes pose the only real threat to the physical security of the United States and its allies.

Accordingly, it is in the interest of the United States to encourage fully the growing, world-wide movement toward self-governance -- the institutionalization of human rights and legally protected freedoms and the growth of free enterprise.

This principle should above all govern U.S. policy toward the Soviet Union. It stands to reason that, if such a communist regime were no longer to exercise exclusive control of the levers of power in the USSR and the Soviet people were at last entitled to basic freedoms, the threat posed to Western interests by the Soviet Union throughout the post-war era would be radically reduced, if not eliminated altogether. Consequently, the character of changes now underway in the USSR and throughout its empire (as communist governments everywhere cope with domestic manifestations of the global drive for freedom) are of enormous consequence for U.S. decision-makers.

Of necessity the preeminent tasks of American security policy in the years ahead must be: to understand correctly the character of these changes, to appreciate their significance for U.S. and Western interests and to tailor strategic and tactical approaches designed to bring about the sort of changes that will truly transform the Soviet Union and its allies.

THE SOVIET RESPONSE TO DOMESTIC DEMANDS FOR FREEDOM

It has never been easy for the West to divine the Soviet leadership's true intentions. Traditionally, this has been due to several factors endemic to the Soviet system. Absolute power has been concentrated in the hands of a very few, an arrangement which lends itself to secretive decision-making. Moreover, Soviet decision-makers have been utterly unaccountable to those they govern -- even as they have been unencumbered by a free press or other domestic mechanisms capable of monitoring their decisions. The aggressive character of Leninist ideology has both required such secrecy and fully exploited communist totalitarianism's ability to provide it.

Curiously, as the Soviet Union has begun to react to popular demands for greater civil liberties and other changes -- and as some aspects of the USSR have become more transparent than ever before -- Moscow's true intentions remain enigmatic. This is partly due to the abiding, secretive character of the Soviet government. It is also due, at least to some extent, to the fact that each day brings new developments, many of which are

unexpected by experienced Western Kremlinologists and call into question conclusions reached only the day before.

But perhaps the most important contributor of all to the present uncertainty about the true character of Soviet intentions is to be found in the striking contrast between stated policies of the Gorbachev regime on the one hand and the reality of its actions on the other.

GORBACHEV'S REFORMS: FACT AND FICTION

Mikhail Gorbachev's recent, highly publicized trip to Cuba and the United Kingdom was especially notable for the disappointed press it received, most of which remarked on the Soviet president's failure during the course of his travels to propose yet another, bold foreign policy initiative or to announce some further, dramatic domestic reform. Indeed, Gorbachev has conditioned his audiences -- particularly foreign ones -- to a steady diet of candid criticism of the existing Soviet system and seemingly radical departures from the USSR's past practices. Such departures have come most frequently in the fields of domestic politics, foreign policy, economics, human rights, and military affairs and arms control.

To a very considerable degree, Gorbachev's initiatives in these fields appear to embrace Western positions and values; terms like "democratization," "deep reductions," "decentralization," "openness," "non-export of revolution," and "defensive defense" now come trippingly to the tongues of Soviet officials. Predictably, the West has responded enthusiastically to such Soviet rhetoric; the industrialized democracies have felt flattered by Gorbachev's evident keenness to accommodate Western concerns.

The Western powers have also sensed vindication in Gorbachev's admissions of past systemic failures and his seeming willingness to undertake fundamental reforms by adopting certain democratic and capitalistic techniques. In their enthusiasm and hopefulness about this Soviet leader and his program, many in the West (e.g., governments, media and publics) have felt the appropriate response is to try to "help" him.

Unfortunately, this response is altogether too frequently disassociated from rigorous analysis of the true character of Gorbachev's "reforms." What is more, it is frequently uninformed by sufficient reflection about the alternatives available -- some of which seem much more likely to result in the sort of transformation of the East bloc too readily imputed to perestroika as presently defined.

Consequently, as the Bush Administration seeks to formulate its own policy toward the Soviet Union, the threshold question should be: Do Gorbachev's "reforms" -- for all their novelty, the fanfare with which they are announced -- entail genuine, structural change in the USSR?

THE LOGIC OF GORBACHEV'S "REFORMS"

In assessing Gorbachev's reform program, it is important to bear in mind that the Soviet regime has demonstrated tactical flexibility before, including a willingness to sacrifice part of its control in order to maintain what it considers to be the most essential levers of power. In the Treaty of Brest-Litovsk, Lenin ceded to Imperial Germany thousands of square kilometers of Soviet territory in order to create the conditions for strengthening the communist hold over the remainder. Similarly, with his New Economic Policy, Lenin gained both a breathing space for the

regime at home and massive economic assistance from abroad. The essential corollary to such tactical flexibility has always been the determination to recover at the earliest possible opportunity what has been lost.

The available evidence suggests that these time-tested Leninist principles are subscribed to by Mikhail Gorbachev. The Soviet changes that have been made thus far pursuant to Gorbachev's glasnost and perestroika, appear essentially to involve a strategy of temporizing to gain a breathing spell and stave off the Soviet Union's deepening economic and political crisis, rather than one of radical reform. Political rights have not been guaranteed. Multiple parties, decollectivization of agriculture, and private property rights have all been explicitly rejected by Gorbachev. Extreme secrecy regarding many matters of state continues to be the rule. Military priorities have not been shifted as the military buildup continues. Soviet violations of commitments made under past arms control accords persist even as Moscow's agitation for new, unsound agreements waxes. The Soviet Union's interest in subversion of democratic governments still translates into vast amounts of financial and material support to militant clients.

The following, systematic review of Gorbachev's agenda for "reforming" the Soviet Union suggests that it is fundamentally of a piece with the experience of earlier Soviet history (e.g., Lenin's New Economic Policy of the 1920's or Khrushchev's "de-Stalinization" reforms of the 1950's). Now, as then, the "reforms" appear principally aimed at strengthening the leadership's authority and control over the power structure, preserving the Soviet Union's worldwide role as the propagator of communism and gaining vital Western economic, financial and technological assistance in the process.

This is not to say that Gorbachev has a carefully crafted master plan for encouraging and manipulating his "reform" agenda; indeed, there is reason to believe he is rather desperately improvising and adapting to the exigencies of his situation. It would be a grievous miscalculation, however, to believe that -- in so doing -- Mikhail Gorbachev is guided by other than a calculating, Leninist strategy.

Domestic Politics

There can be no mistaking the fact that, under Mikhail Gorbachev, the USSR has experienced dramatic liberalization. The publicizing of such changes -- for foreign, as well as domestic, audiences -- has been the principal thrust of glasnost and Gorbachev's greatest success to date.

Too often missed in the analysis of this liberalization is the fact that it is taking place firmly within the existing, totalitarian political system. All of the levers of power remain in the hands of the regime. There has been no change in the ability of the population to influence basic decisions that affect its future well-being. Indeed, the nature of the liberalization process itself speaks volumes about its fundamental character -- welcome though it is, it has been imposed entirely from above. In every specific case, Gorbachev's political reforms represent a widening of what is permitted; they do nothing, however, to alter the arrangement by which such permission is given. It is still the regime that decides.

The reform of the political system to include contested elections, the recent revision of the criminal code to include two new political articles which are -- on paper at least -- more severe than the articles they replaced, the plan for the reorganization of the economic mechanism of the country including the new law on enterprises, the lease plan in agriculture and the

new law on cooperatives were all promulgated without the slightest participation of the population. The Soviet people had no more influence on the decision to withdraw from Afghanistan than it had on the decision to invade. Nor does it have any influence over the allocation of resources which condemns the overwhelming majority of the population to live in conditions that would be unacceptable to American welfare recipients while supporting the largest military establishment in the world.

Under communist ideology, the people are by definition without rights. And -- despite the recent changes -- **Soviet citizens remain without rights.** Moreover, the Soviet reform effort has, in every case, stopped short of effecting those economic transformations which, by virtue of the social changes they would inevitably entail, might hold out the hope of creating a social and political base for the creation of rights.

Importantly, Gorbachev himself has been perfectly clear that his reform program does not countenance fundamental structural changes. In his view, **the Soviet reform process precludes the establishment of private property, the historic social basis for human rights.** Gorbachev has also rejected the notion of a multi-party system capable of offering Soviet voters a real alternative after seventy-two years of communist terror and misrule. Similarly, he has refused to grant any legal standing -- and consequently any institutional legitimacy -- to "informal" organizations (from stamp collecting societies to the anti-Stalinist organization, Memorial) which continue to operate, as a result, simply at the pleasure of the state.

Under these circumstances, the Soviet reform effort presents dangers for the rest of the world even as it grants somewhat greater freedom to its citizens. Political liberalization, in the absence of structural reform, can only play a **destructive** role in a society which depends upon the plausibility of a false ideology for its moral legitimacy. **The danger of the present situation is that the Soviet regime, having jettisoned a part of its claim to legitimacy in the interest of economic progress, may find that it has little alternative but to resort to brutal repression in order to bring under control the political and intellectual forces that its new-found, relative honesty has inspired.**

Under the circumstances, a crisis inspired by the attempt to maintain a political structure which has lost its moral legitimacy could present the Soviet leaders with a need to fabricate a new claim to authority by engaging external enemies in the West.

The March 1989 Elections

The single most important "reform" introduced by Gorbachev to date on the domestic political scene involved the much-publicized elections for a new legislative body held in March 1989 in the USSR. Amid the spectacle of Soviet communist leaders being defeated in an open poll, many troubling aspects of the elections have received inadequate attention. In the first place, Soviet voters went to the polls having no idea for what they were voting. Ordinarily, in a society holding elections, the political rules are made clear to the voters **before** they cast their ballots. In the USSR, however, no Soviet citizen could know with confidence before he voted what the election actually meant. For that matter, no Soviet citizen knows it even today.

Among the crucial, but as yet unanswered, questions that must be asked about the recent Soviet elections -- questions vital to any assessment of the import of Gorbachev's political reforms -- are the following:

- What will be the real power of the Congress of Peoples' Deputies?

- How will the 544 member Supreme Soviet be chosen from among the members of the Congress of Peoples' Deputies?

- To what extent will the 90-odd percent of the Congress of People's Deputies who are members of the Communist Party be subject to party discipline according to which every communist must accept, and repeat as his own opinion, the decisions of the oligarchical party elite? (It should be remembered that even Boris Yeltsin -- who is now being celebrated for his "independence" -- on three occasions recanted perfectly justifiable remarks about the slow pace of perestroika and asked for "forgiveness" from his Communist Party leaders.)

- The law establishing the new political system was promulgated under the old Supreme Soviet, which was totally controlled by the Communist Party. If the results of this new system are not to the Party's liking, is the Communist Party in a position to eliminate this system and put something else in its place? If not, then why has Article 6 of the Soviet Constitution -- which says that the leading role in Soviet society belongs to the Communist Party -- not been eliminated?

- Why is it assumed that, at the local level, the First Secretary of the Communist Party will be the President of the local soviet? Such a provision effectively nullifies the possibility of the local soviets functioning as genuinely representative organs.

- What is the justification for the pre-election commissions which function at every level to screen candidates, eliminating those -- with rare exceptions -- who are unacceptable to the party leadership (which effectively controls these commissions)? Indeed, throughout the election process, party officials have packed the meetings of commissions and resorted to a panoply of dishonest tactics to prevent truly independent candidates from prevailing. This was especially notable in the nominating meetings for Yevtushenko, Korotich, and others.

Foreign Affairs

The stage of foreign affairs is one that Gorbachev has played with consummate skill. He has used muted rhetoric and manifest restraint, dazzling inventiveness and seductive diplomacy to create vivid contrasts between the current Soviet policy line and that of his predecessors. Yet here too, there is ample reason to believe that the Soviet Union's international and ideological goals have not changed -- only its tactics.

The Afghan Case

The most widely cited evidence of the Gorbachev regime's "reformist" thinking on foreign policy is the Soviet decision to end its occupation of Afghanistan. On the face of it, the removal of roughly 100,000 troops following nine years of bloody conflict with the rag-tag mujaheddin appears to be a stunning acknowledgement of defeat. On closer inspection, however, the Afghan case suggests that there is less to the apparent change in Soviet policy than meets the eye.

It must be noted that, in the years after the military occupation of Eastern Europe, the Soviet Union has consistently sought to implant communist regimes around the world by

supporting indigenous "progressive" forces. Taken in its entirety, this effort can be viewed to have been quite successful in those circumstances where the Soviet Union (or its allies) did not intervene directly and militarily, but merely provided military aid, ideological guidance and encouragement. By contrast, the Soviet Union has repeatedly failed -- with the exception of Eastern Europe -- to achieve its objectives in those situations (e.g., Afghanistan, Angola, Cambodia) where either it or its allies have introduced military forces.

Against this background, the troop withdrawal from Afghanistan must be viewed as less a Soviet renunciation of foreign adventurism and more as a reversion to the USSR's previous -- and largely successful -- ideological tactics. Where it once contented itself to provide military support to communist guerrillas, Moscow will now provide significant military, internal security and economic assistance to the puppet regime which its troops installed in Afghanistan. The Soviets may or may not be successful in maintaining communist regimes in power in countries like Afghanistan, but the West should be under no illusion: the USSR's withdrawal of troops from Afghanistan only means that the Soviet Union is now pursuing traditional, expansionist aims with Afghan rather than Soviet troops.

Further evidence of the true character of Soviet policy in the region can be found in several other developments:

Intimidation of Pakistan: The decision to withdraw Soviet troops from Afghanistan was preceded by a campaign of indiscriminate terror in Pakistan conducted by Khad, the Afghan secret police, under the direction of the KGB. In 1987, roughly 90% of the world's victims of terrorism were Pakistani civilians killed in the campaign waged by Khad with the cooperation of Soviet authorities aimed at intimidating Pakistan into ending its support for the mujaheddin. The most prominent victims of this brazen terrorism would appear to be the bulk of the Pakistani leadership killed when President Zia's aircraft was destroyed in the summer of 1988.

Conduct of the War: The early years of the Gorbachev period were marked by a change in the Soviet military command in Afghanistan. A new commander, General-Lieutenant Boris Gromov, was put in charge of the war shortly after Gorbachev came to power with orders promptly to turn the tide of the fighting. Thus commenced one of the bloodiest periods of the conflict, a phase characterized by massive, punitive raids against peaceful villagers on a scale and at level of brutal ferocity not seen since the Nazi occupation of Europe in the Second World War.

Continuing Soviet Involvement in Afghanistan: There are also many indications that the Soviet Union is not ready to leave Afghanistan to chose freely its own future. Numerous Soviet regions have been "twinned" with sections of Afghanistan, particularly those of the northern tier adjacent to the border with the USSR. Long-term political and economic relations have been established between such "twins."

One important feature of such a long-term relationship is to be found in the fact that Afghanistan's most important natural resources (e.g., natural gas, copper, etc.) have been connected to the Soviet Union's economic grid with the help of roads and dedicated pipelines. As a result, a future Afghan government will, as a practical matter, be forced to deal economically with the Soviet Union under almost any conceivable circumstances. This reality alone virtually ensures that the USSR will enjoy considerable, direct influence in Afghanistan -- with or without a communist government.

Soviet Encouragement of Chaos in Afghanistan: This is all the more true in light of the fact that Soviet policy in Afghanistan has been designed to create the conditions for civil war between the factions of the mujaheddin in the event that Soviet troops were withdrawn. In the aftermath of the Afghan peace accords, the following Soviet actions appear calculated to enable the USSR to look after its interests there:

- Substantial numbers of Soviet personnel remain in country, including possibly tens of thousands of KGB troops and others not counted as "military," but fully capable of performing both security and combat functions.

- Moreover, there is reason to believe that the Soviets are undertaking in Afghanistan what their allies elsewhere appear to be doing in the course of counterpart troop withdrawals from Angola and Vietnam, namely melding ethnic forces into indigenous military structures -- i.e., Soviet Tadjiks "becoming" Afghans, black Cubans identified as Angolans, Vietnamese of Cambodian-descent donning Cambodian uniforms.

- A very large Soviet airlift of war material, ammunition and food continues to flow into Kabul, ensuring that the Soviet puppet regime retains superiority in firepower and the wherewithal to stave off the mujaheddin. Particularly alarming in this regard are reports suggesting that the Soviets are equipping the Afghan regime for chemical warfare. The failure to date of the siege of Jalalabad suggests that such a policy may work, if not indefinitely, for far longer than expected throughout the West.

- The Soviets have laced vast stretches of the Afghan countryside with deadly mines that will likely render such regions essentially uninhabitable for years to come, making the resettlement of millions of refugees presumably hostile to the regime problematic.

Tactical Benefits to the Soviets of Withdrawal: The Soviet withdrawal of much of its occupation force from Afghanistan has, of course, accomplished several important objectives. It has removed a major irritant in Soviet relations with the West and many Arab nations. This has both facilitated Soviet efforts to seek political and economic rewards for such amelioration of its behavior and attenuated the perceived need of many foreign powers to support the mujaheddin. Simultaneously, by removing the visible symbol of Soviet aggression, the withdrawal also greatly complicates efforts to create (or sustain) a unified Afghan opposition.

In fact, the Soviets, by arguing that <u>it is they</u> who are the party determined to stop the conflict -- in contrast to the American commitment to maintain the supply of arms to the Afghan rebels -- are beginning to score significant public relations coups by blaming the mujaheddin and their foreign backers for the continuing bloodshed.

In short, the Soviet Union is still very much in a position to pursue its longstanding objectives in Afghanistan, namely maintaining hegemonic influence over Afghan domestic affairs and intervening as necessary to prevent the emergence of a sovereign and independent regime on its southern border. What is more, the Afghan enterprise is typical of Gorbachev's apparent, wholesale adaptation in foreign affairs of the Leninist doctrine of "<u>reculer pour mieux sauter</u>," i.e., tactical retreat in order to advance strategic objectives.

Human Rights

In the area of human rights, the situation in the USSR has unquestionably improved in marked ways, but this improvement is quantitative, rather than qualitative: Hundreds of political prisoners have been released; there has been a significant decrease in psychiatric repression; hundreds of long-time refuseniks have been allowed to leave the Soviet Union.

At the same time, however, in each of these areas there continue to be victims of official repression; indeed, the Soviet authorities have made no move to change the legal relationship of their citizens to the state. In particular, no firm basis for the exercise of political and human rights has been created.

Political Prisoners

All of the political prisoners convicted under the previous political articles (in the Russian Federation: Article 190-1 forbidding "Anti-Soviet Propaganda," and Article 70 barring "Anti-Soviet Agitation") have apparently been released. There continue, however, to be political prisoners charged under other articles of the criminal code that are seemingly non-political (e.g., Article 190-3 which governs "Active Participation in Group Actions Disturbing the Peace").

In addition, there have been new political articles introduced into Soviet law which are more restrictive than the old ones (the latter of which have not yet been removed from the books). Some of these new laws punish "calls for the overthrow or change of the Soviet state or system" or "insulting or defaming public organizations." Quite recently, the thirteen members of the Armenian Karabach Committee have been charged with violation of Article 190-3 in connection with their leadership of the non-violent movement to join Nagorny Karabach to the Armenian republic.

Besides the members of this committee, Soviet political prisoners still being incarcerated include: persons arrested while trying to escape the Soviet Union by illegally crossing the border; soldiers charged with treason for inadvertently repeating completely innocuous information about their units to other Soviet citizens; and former dissidents -- like Pavel Kampov, a blind and seriously ill Ukrainian nationalist -- who are arrested and tried on trumped up criminal charges.

It is also noteworthy that, in every case, those prisoners who were released were said to have been "pardoned;" not a single one of the released prisoners has been "rehabilitated." All continue to be considered to have committed a crime. What is more, those prisoners who refused to "request" such a pardon where detained in prison for up to two years after the liberation of such individuals began, in an effort to force them to ask for a pardon. This brutal extortion is all the more ironic in light of the fact that in many cases these prisoners were arrested for the circulation of literature and ideas that are now being published <u>legally</u> inside the USSR.

Moreover, despite months of rumors that the political articles in the criminal code where about to be eliminated, the Soviet authorities have just introduced new political articles which, at least on paper, are more severe than the previous political articles. This is troubling to those concerned with the quality of human rights in the USSR insofar as the Soviet Union has always found a use for new legislation on political crimes once it has been introduced.

Psychiatric Repression

There have been many releases of political prisoners from Soviet ordinary and special psychiatric hospitals but the vulnerability of a Soviet citizen to psychiatric confinement has not changed.

The special psychiatric hospitals have been transferred from the Ministry of Internal Affairs to the Ministry of Health. They have been given a new name -- hospitals with "strict regime." They have, however, the same structure and the same personnel; they employ the same barbaric methods; and dissidents continue to be interned in them (e.g., Anatoly Ilchenko, a mathematics teacher and member of the Ukrainian Helsinki Monitoring Group arrested on December 23, 1988 after sending a letter to the party leadership advocating tent shelters for the homeless).

At the same time, the focus of psychiatric repression has shifted from the major cities to the provinces. While victims of psychiatric hospitals are being held for shorter periods of time, the practice whereby they are abused has not ceased. Moreover, Soviet psychiatric officials to this day have refused to acknowledge that political repression by means of psychiatric confinement ever took place.

In Leningrad, dissidents being investigated in connection with "Case No. 64," an investigation of the Democratic Union which is attempting to establish an independent political party, have learned that one of the questions put to their relatives by KGB investigators is whether they had psychological problems as children. This is further evidence that the Soviet authorities have not discarded the option of using psychiatric confinement as a means of curbing dissent.

Emigration

There is increased emigration from the Soviet Union. The liberalization of travel regulations has created a situation in which thousands of Soviet citizens are travelling abroad for the first time. The number of known refuseniks is down to about a hundred families, a very low number relative to the thousands of refuseniks who found themselves stranded in the Soviet Union in the early 1980's with no hope of leaving. All that said, there is still no free emigration from the USSR.

Furthermore, despite the dramatic increase in the number of permissions granted to those seeking to leave the country, the handful of refuseniks still attempting to leave are being treated with precisely the same bureaucratic sadism as that experienced by refuseniks during the period when emigration was barely allowed. For example, Georgi Samoilovich, a refusenik suffering from advanced cancer, was only released through the personal intervention of British Prime Minister Margaret Thatcher; critical months were, nonetheless, wasted awaiting permission for him to leave to obtain medical treatment in the West. Other refuseniks continue to be denied permission for alleged exposure to secrets as much as twenty years earlier. There are also cases of people being told they can leave, only to be informed at the last moment that the authorities had changed their minds because of "new circumstances."

Despite talk of liberalization of the rules on emigration, as a practical matter, emigration is restricted to members of three groups: ethnic Germans, Jews and Armenians. Even foreign travel is out of the question for the vast majority of Soviet citizens insofar as permission to travel depends on receiving an invitation from abroad; at present, only members of the three

affected groups and of the Soviet intelligentsia have hope of getting such invitations.

Religious Practice

New legislation in the Soviet Union appears designed to relax the state-sponsored persecution of religion. The new "project," or preliminary version of legislation, governing freedom of conscience includes several provisions intended to liberalize the existing policies toward the church. Churches and church institutions are given juridical status within the Soviet system and the right to religious education is expanded. Freedom from discrimination for religious believers has also been promised, accompanied by the opening of a certain number of churches and a slackening in the overt persecution of members of various Protestant denominations.

Despite these positive changes, however, religion continues to be at a severe disadvantage in the USSR. Atheism remains the foundation for the official world-view of the Soviet regime and the basis of instruction in all state educational institutions. Advancement in Soviet society is still reserved to members of the Communist Party, who must profess atheism.

The fact is that the USSR remains a profoundly atheistic country with most citizens never having heard of the Ten Commandments. Even with the opening of additional Russian Orthodox churches in 1988, by the summer of that year there were only 6,893 congregations compared to 8,500 congregations in 1983. The damage from past repression is such that it will take years for religion to recover in the USSR; the Soviet government can afford considerable liberalization in the meantime.

Economic Policy

The keystone of the entire Soviet reform program is the attempt to rejuvenate the stagnant Soviet economy. But just as political liberalization of the Soviet Union is intended to take place within the context of the existing structure, the economic reforms being introduced are designed to decentralize and introduce private enterprise only within politically controllable parameters. Optimism about the effect of economic reforms in the Soviet Union is, therefore, unwarranted.

All of the economic reform measures that have been introduced up to this point have been tailored to prevent the emergence of independent social and economic forces. The reform of agriculture is intended to take place within the framework of the collective farm system. The reform of industry is intended to occur within the context of a planned economy and in the absence of a free market. Notwithstanding a future 14% cut announced for the Soviet military budget, there is no evidence to date that the absolute priority given to heavy industrial and military production is actually going to be changed.

Agriculture

The Soviet leadership has agreed to allow peasants to rent plots of land in an effort to overcome the present, catastrophic situation afflicting the food supply. But the land may not be sold to the peasants; neither can a free market be created in fertilizer, seed and other vital supplies. As a result the collective farmer remains -- even as he is being encouraged to assume responsibility for his own production -- completely dependent upon the bureaucracy of the collective farm which has

no desire to see him prosper independently. Under the circumstances, and in light of the traditional Soviet hostility toward those who make good through their own efforts (to say nothing of the still vivid memory of mass murders of millions of Soviet peasants during forced collectivization under Stalin), it is not surprising that very few have agreed to take advantage of the opportunity to rent the land.

Industry

Similarly, the law on state enterprises -- the centerpiece of the economic reform program -- holds enterprises and their workers responsible for making a "profit," despite the absence of a genuine market and the fact that the allocation and movement of all supplies to such enterprises remain the exclusive purview of the administrative organs of the state. Under the circumstances, the enterprises may be accountable for failing to make a profit under conditions in which the fault lies not with the enterprise but with inefficiency of the planned economy as a whole.

One of the reasons for the constant disruptions and spectacular waste in the Soviet economy is the fact that it is based on fixed-prices established not by the market but on the decisions of the planning organs of the state. As a result, supply is never brought into harmony with demand and goods are produced, but never available where they are needed. If the Soviet Union were truly committed to eliminating the disruptions which make the laws on enterprises a non-starter and, by its nature, a means of coercing the Soviet workers, several radical steps would be required: It would be necessary to liberate prices, an action which, under the present conditions of enormous unsatisfied demand, would create staggering inflation. It would also require the immediate creation of free trade unions to negotiate fair prices for workers' labor. Obviously, such steps would undermine completely the social and ideological basis of the Soviet state.

Military Affairs and Arms Control

The area of Gorbachev's "reforms" that has most dramatically affected Western attitudes about, and support for, his regime is that of Soviet military and arms control policy. It is equally true, however, that this is the area in which the least material change has taken place to date. Consider the following:

Arms Control

The Soviet Union has been found by the U.S. government to have engaged -- under Gorbachev's regime and those of his predecessors -- in a pattern of violations of major arms control agreements. These include the ABM Treaty, the Limited Test Ban Treaty and chemical weapons conventions as well as other international agreements such as the Helsinki Final Act. And yet, even as it proceeds such violations of existing agreements and a sustains a relentless military buildup (N.B. the United States is in its fifth consecutive year of declining defense investment), the Soviet Union is promoting an array of arms control proposals. These include proposals affecting forces and activities involving in nuclear, conventional, and chemical arms and strategic defenses.

Such Soviet proposals appear to make major concessions in several areas, notably in their acceptance of the principles of on-site verification and asymmetric reductions. A number of the suggested agreements, however, involve limitations (e.g., those

on mobile intercontinental ballistic missiles) and bans (e.g., chemical, anti-satellite and nuclear testing) that simply cannot be verified effectively. The Soviet-proposed asymmetric reductions become far less impressive when one notes (as in the INF Treaty) that other new Soviet systems being deployed (e.g., the SS-24 and SS-25 mobile ICBMs) can readily fulfill the missions of the forces being reduced. What is more, given the intractable verification problems associated with monitoring some of the forces to be reduced, it is impossible to have great confidence that the promised benefits of such agreements will actually be realized.

It should be noted that, simply by tabling their proposals, and without having to effect actual reductions in their military spending or their weapons production, the Soviets have already had considerable successes under Gorbachev in interfering with U.S. and NATO defense programs. For example, even though Soviet violations have long ago broken the ABM Treaty, Soviet arms control proposals and diplomatic pressures have succeeded in encouraging restrictions on U.S. strategic defense activities by claiming the need to preserve the Treaty. Similarly, following the INF Treaty, the Soviets have pushed hard to build public support in the West for delaying -- if not preventing -- important NATO modernization programs.

Defense Budget

The West has been particularly dazzled by Gorbachev's announced intention to effect dramatic, unilateral reductions in the size and character of the Soviet military. His stated intention to remove 500,000 men and 10,000 tanks from Eastern Europe is frequently treated as an accomplished fact -- one which has already reduced the threat to the West. What is more, this action has been widely viewed as obligating allied nations to respond in kind by making their own dramatic and unilateral budget cuts and/or exercising restraint in vital weapons modernization programs.

In reality, there is no evidence that the USSR has yet embarked upon the kind of massive reallocation of resources promised by perestroika. Totalitarian communism remains the only system capable of sustaining peacetime military expenditures on the order of 20-25% of Gross National Product. The cost of doing so is real and clearly contributes greatly to the incalculable hardship inflicted daily on Soviet citizens. For example, the magnitude of the loss of life caused by the recent earthquake in Armenia was in large measure attributable to the fact that civilian construction in the USSR is systematically denied the steel prudent building techniques require in such a seismically active region. At the same time, there is no such shortage when it comes to the construction of tanks which continue to be produced at a rate of over 3,000 per year.

There are reports that military factories have been ordered to produce civilian goods -- but only in addition to meeting their planned production for the armed forces. One can detect no indications in Soviet stores that military production has actually been diverted. To the contrary, if anything, the unavailability of basic consumer goods is worse than ever. Butter, meat and even soap are rationed all over the country -- an astonishing indictment of the deplorable living standards in a nation that prides itself on being a global superpower.

Interestingly, when Khrushchev made his own reductions in the Soviet military (cuts that were vastly larger than those announced by Gorbachev), former army officers became available to

the civilian employment market; there was similarly a boom in the civilian housing market and a noticeable increase in consumer goods. None of these manifestations of true resource reallocation are noticeable thus far as a result of Gorbachev's announced defense reductions.

Military Glasnost

As noted above in connection with the Soviet Union's current stance on verification of arms control agreements -- namely its apparent commitment to intrusive on-site inspection -- the Soviet military has been at pains to appear less secretive than in the past. Visits for Western dignitaries to inspect military installations and modern armaments, exchanges between senior students at military academies and candid accounts of the shortcomings of Soviet armed forces in Afghanistan -- all convey an impression of unprecedented openness, seemingly incompatible with hostile intent or threatening capabilities.

In fact, the Soviet military remains secretive and fully capable of holding vital Western security interests at risk. Its budget continues to be a closely held secret -- making it impossible to assess the implementation of Gorbachev's commitment to reduce defense spending by 14 percent. Publications released in 1989 for the ideological training of the armed forces contrast sharply with the official rhetoric about the adoption of a "defensive defense" strategy and the end of the adversarial relationship with the United States. Programs, including the use of outright deception, aimed at concealing the character and magnitude of Soviet weapons programs continue apace. The USSR's own espionage and subversive activities -- and those of Soviet proxies continue apace.

The principal result of Soviet military "reform" efforts to date appears instead to be that Western governments, media and publics have become convinced that the threat posed by the USSR's armed forces is diminished. This perception has had several practical and beneficial effects for the Soviet national security apparatus: First, it has greatly attenuated support for Western military preparedness, providing "a breathing space" (peredyshka) vitally needed if the Soviet Union is to restore a favorable correlation of forces.

Second -- and closely related to the first -- is the opportunity such a changed perception affords for access to Western high technology. As the West's guard has dropped, sensitivity about selling militarily-relevant equipment and manufacturing know-how to the USSR has also given way to a feverish competition to sell the Soviet Union virtually whatever it wishes to buy.

Third, Soviet efforts to penetrate American and other advanced countries' industries and institutions for intelligence collection and other purposes has grown markedly. A senior French official recently estimated that such activities had grown four-fold during Gorbachev's tenure. The Director of the Central Intelligence Agency, William Webster, remarked in a similar vein on the growing challenge to U.S. counter-espionage capabilities by Soviet military and KGB operations under Gorbachev.

HOW TO ENSURE THAT THE SOVIET BLOC IS GENUINELY TRANSFORMED

The foregoing evidence suggests that, all other things being equal, perestroika as defined by Gorbachev will not result in a fundamental transformation of the Soviet system. What is more,

it raises serious questions about the probable effect of many of the Western initiatives now being considered to "help" Gorbachev succeed. Untied loans and access to Western financial institutions for the USSR and nations in its bloc; large-scale transfers of militarily relevant technology and further relaxation of already inadequate efforts to halt illegal Soviet diversion of such technology; substantial reductions in Western defense expenditures and readiness; bold, if unverifiable, arms control initiatives and assorted regional settlements to which the Soviet Union would be made party or guarantor -- these are but a few of the notions being urged on Western governments.

If the West is serious about bringing about a genuine diminution of the threat posed to its security by the Soviet Union and if the United States wishes to promote real freedom in the USSR as elsewhere, a starkly different approach must be defined and implemented. In contrast to a policy that principally entails subsidizing and otherwise propping up Gorbachev and his vision of perestroika, this strategy would entail seizing the historical initiative by using all available Western resources and leverage to transform the totalitarian Soviet system. The concept would be to make such assistance available to the Soviet bloc in ways and on terms designed to produce maximum structural change in the Soviet bloc.

This approach will entail doing business -- both literally and figuratively -- with the USSR and its allies differently than in the past. Specifically, it will require Western governments and companies to work concertedly with private, non-communist groups in the Soviet Union and the East bloc (not simply the ruling regimes' leaders) with a view to stimulating and supporting forces that will inevitably lead to new economic and political structures. In short, every appropriate Western resource and degree of leverage would go toward creating genuine perestroika -- real and irreversible change in the character of the West's principal adversary and its allies.

Such a conditioned approach to Western assistance to the Soviet Union and Eastern bloc, like a step-by-step loan disbursement arrangement predicated on performance toward publicly identified milestones, should not be unduly onerous for promoting non-strategic commercial activity and similar developments within the civilian economic sectors. On the other hand, if the Soviets and their allies really have an ulterior motive in mind -- not the salvation of their economies and countries through radical structural reform but the shoring up of the existing regimes and the preservation of their threatening military establishments -- such an arrangement would be a show-stopper. In the latter case, however, the West would presumably not be interested in helping bring about such an outcome anyway.

The main elements of a new initiative, aimed at "helping" democracy in the USSR and not just Gorbachev would include the following:

Economic Policy

The economic and financial crises confronting the USSR, most of Eastern Europe and Soviet client states elsewhere offers the West unprecedented opportunities to stimulate genuine economic and political reform. There are numerous ways in which constructive leverage can be brought to bear:

Financial Tools

- o The two key elements in Western lending to the USSR, Eastern Europe and other Soviet client states are greater discipline and transparency.

  - -- All loans should be tied to specific projects or trade transactions through the use of established lending techniques and expanded reporting requirements.

  - -- Untied loans only serve to postpone the need for tough resource allocation decisions and provide more flexibility to divert the proceeds of Western credits to financial activities potentially inimical to vital Western security interests.

  - -- Continuing present, undisciplined lending practices increases the likelihood of deepening the Eastern bloc's debt crisis and recruiting new victims -- possibly even the USSR itself.

    - oo Adding this burden to those already imposed on American taxpayers by the international debt crisis, the U.S. savings and loan industry, and potentially precarious leveraged buy-outs, would represent intolerable budgetary strains during this period of austerity.

- o The conditions for any Western government lending should be:

  - -- Massive privatization of the Soviet bloc economies, including key heavy industries and agriculture;

  - -- The systematic reallocation of priority resources away from the military sector to the destitute civilian economies;

    - oo An important and visible feature of this reallocation process would be the conversion of extensive military infrastructure to civilian production -- particularly weapons production dedicated to supplying Soviet end-users;

  - -- Sharp reductions in the size of the bloated government bureaucracies and the expensive privileges enjoyed exclusively by the nomenklatura -- as opposed to reducing further the living standards of ordinary citizens.

  - -- As a matter of alliance policy, government loan guarantees to Soviet bloc countries should be strongly discouraged as their effect is to transfer the credit risk associated with any future debt reschedulings or default from the commercial banks involved to Western taxpayer.

- o If and when Soviet bloc authorities demonstrate the political will to implement such market-oriented programs, the alliance should publicly agree on specific goals -- and specific milestones for achieving these goals -- upon which **all** disbursements of funds from various sources (e.g., bilateral government loans and credit lines, IMF disbursements, World Bank co-financing, etc.) will be made contingent.

Trade

- Expanded flows of technology with dual-use applications to the Soviet bloc should be predicated upon the end of a military threat to Western interests from this quarter.
  - -- Otherwise, such transfers simply constitute a subsidy to the West's adversaries potentially worth billions of dollars in avoided research and development costs and enhanced military capabilities.
- Were such trade to occur, the emphasis should be on the sale of end-products, as opposed to turn-key manufacturing and processing capabilities.
- Moreover, trade should emphasize the creation of private enterprise in the Soviet bloc; accordingly, Western businesses should seek to work with non-governmental entities in the Soviet Union and Eastern Europe.
- Principles like those developed by Alexander Slepak should be observed by any Western company operating within the Soviet bloc in the interest of advancing human rights (much as the Sullivan principles seek to advance greater equality and human rights in South Africa).

Human Rights

- Allied nations should attend the Moscow human rights conference in 1991 only if fundamental structural change has been effected, endowing Soviet citizens with genuine civil liberties and personal freedoms such as:
  - -- The real establishment of rights in the USSR, e.g., not simply the state granting its permission to citizens to emigrate, dissent, worship, and own property but entitling them to the right to do so ;
  - -- A genuine legal system -- including an independent judiciary -- to replace the system of "connections" and influence-trading between party oligarchs at all levels of the hierarchy, and affording the governed an opportunity to have a real say in the enactment of the laws by which they are ruled;
  - -- The creation of a true multi-party system at least as vigorous as that promised for Hungary;
  - -- The establishment and legalization of free trade unions using the model of Solidarity in Poland;
  - -- The prohibition of government censorship as announced recently in Hungary and decontrol of supplies that inhibit the operation of a truly free press -- and the right of dissident publications to circulate freely.

Military Posture and Arms Control

- The United States and its allies must maintain a robust defense posture and eschew unsound arms control agreements for two overriding reasons:
  - -- First, the continued investment by the West in highly capable deterrent forces is necessary to ensure that no military advantage accrues to the USSR and its allies

as a result of the latter simply adopting the rhetoric of restraint.

- oo Under such circumstances, the Soviets would be foolish actually to reduce the high priority presently given to the military.

- oo In particular, U.S. investment in such highly leveraged technologies as those involved in the Strategic Defense Initiative and "Stealth" programs can greatly diminish the value of major Soviet military investments (e.g., those in ballistic missiles and air defenses) and provide powerful incentives to the USSR to deemphasize outlays for weapons and related hardware.

-- Second, in the event the Soviet Union reverts to form, as Secretary of Defense Cheney has predicted it will, and the West is obliged to contend once more with the full panoply of expansionist Soviet ambitions, the United States and its allies will be far better able to do so if they have kept their guard up in the meantime.

o The central elements of such a deterrent posture would be modern nuclear arms and deployed strategic defenses; these must be accompanied by a revised approach to the negotiation of strategic arms reductions and a real policy for dealing with Soviet non-compliance.

-- A detailed description of a package of strategic force modernization and arms control initiatives recommended by the Center for Security Policy can be found in its recently released paper, **An Assessment of Future Requirements for U.S. Strategic Forces and Strategic Arms Control.**

Regional Policy

o The United States must make clear its determination to continue to press the Soviets and their militant allies to cease subversive activities, notably in Central America and Africa.

-- In particular, America must provide -- and, if necessary, expand -- its economic, diplomatic and appropriate military assistance so as to reverse the consolidation or growth of communist regimes in the Third World.

-- The objective of such assistance should be to promote self-determination and freedom through the achievement of independent, non-communist regimes.

Sound Intelligence

o In times of uncertainty and change, policy-makers are particularly dependent upon effective intelligence collection and analysis, which must seek to identify threats to American security as well as opportunities to advance U.S. interests.

-- Fast-moving events in the Soviet Union make the demands upon U.S. intelligence extraordinarily severe, particularly in light of continuing Soviet denial and deception practices.

-- Moreover, when -- as at present -- American policies are being reconsidered in light of assessed changes in the threat, the potential is high for the objectivity of the analysis to be compromised in order to justify certain policy approaches.

-- Under such circumstances, it is vital for the integrity of the intelligence process that competitive, "opportunities-oriented" analysis be institutionalized.

o Accordingly, President Bush should reconstitute the President's Foreign Intelligence Advisory Board (PFIAB), a senior-level panel that plays a crucial quality-control role for the U.S. intelligence community by reviewing and, where necessary, second-guessing the quality of its judgments.

o What is more, the approach utilized in 1976 by then-CIA Director George Bush to challenge the assumptions and analysis of the official estimates of Soviet military activities should be institutionalized.

-- With hindsight, it is apparent that this so-called "Team B" proved more accurate than its official counterparts when it came to projecting the character of Soviet policy and programmatic activities in the heyday of the 1970's detente.

-- Should such a competitive approach be pursued henceforth, the result will be to invigorate and improve the quality of formal intelligence community estimates and their usefulness to policy-makers and to help insulate such analyses from undue political influence aimed at eliciting a desired answer.

Clear-eyed Leadership

o Western policy-makers, once equipped with objective appraisals of the direction and purposes of Soviet activities, must ensure that such data informs the public debate. It is particularly important that American and other leaders do nothing to compound the considerable confusion of cosmetic, albeit novel, changes in the USSR with fundamental transformation of Soviet conduct.

o Similarly, where the changes promised by Soviet rhetoric might represent meaningful reforms, it is incumbent upon the West to illuminate discrepancies between such rhetoric and actual behavior on the part of the USSR and its allies.

o Above all, unless and until the Soviet bloc undergoes the sorts of fundamental reforms called for here, Western leaders must avoid promoting through summitry or incautious public statements the impression that the Soviet threat has significantly diminished or disappeared until it actually does.

-- In this regard, assessments of Soviet behavior -- such as public recognition of the USSR's continued non-compliance with international agreements, Soviet disinformation and outrage over Moscow's repression of nationalists and other dissenters (including through the use of poison gas) -- must not be down-played or distorted.

-- The Bush Administration's announced policy of self-restraint in such areas runs the risk of being

seriously misconstrued by Moscow as tolerance for, if not indifference to, such unacceptable Soviet behavior.

- The United States must conduct a broad-based information and public diplomacy program, including white papers, radio (especially Voice of America and Radio Liberty) and television, both as means of pressing for fundamental changes in Soviet actions at home and abroad and as a way of ensuring that the American people and others (on both sides of the Iron Curtain) are apprized of the true state of developments in the Soviet bloc.

  -- In this connection, official U.S. information media should recognize that it is the policy of the American government to encourage peaceful change in the Eastern bloc -- not simply to strive for harmonious relations between the United States and communist governments.

  -- While acrimony, abusive language and gross disinformation -- all characteristic of certain types of Soviet public relations activities -- should be avoided, emphasis should be given to information that will encourage individual, spontaneous activities particularly in economic, cultural and scholarly affairs.

    oo Examples of such information might be data pertaining to establishment of cooperatives, pursuit of independent historical research, informal publishing, establishing ecological and consumer-oriented "informal" organizations.

    oo Publicity from abroad on these is often the best way to protect them from repression by the authorities.

CONCLUSION:

It is apparent that the Bush Administration is divided on the question of the prospects for Mikhail Gorbachev's success. Some, like Defense Secretary Cheney and Deputy National Security Advisor Gates properly view them as bleak; President Bush, Secretary of State Baker and White House Chief of Staff Sununu are apparently more sanguine. In any event, no one yet knows the answer to a second, related question: If, with Western help, Gorbachev does succeed with his version of perestroika, will the result be a more inward-looking and peaceful Soviet Union, or an economically stronger and more dynamic adversary?

In light of such acute -- and strategically consequential -- uncertainties, U.S. policy toward the Soviet Union and the Eastern bloc must be based upon more than an ill-considered, open-ended desire to "help Gorbachev's perestroika succeed." Such a policy approach cedes the initiative to the United States' adversary, may well have anti-democratic and economically counterproductive results, and clearly subordinates the expansion of liberty to a concept of "stability" that probably will be neither all that stable nor in the West's long-term interests.

This is no time for a passive, reactive or paralyzed American foreign policy. Now more than ever, U.S. initiative and leadership are required if the West is to define Gorbachev's success in terms consistent with democratic interests rather than his own. Both will be required in quantity if the present

impulse to accede to Gorbachev's efforts aimed at sowing discord within the Western alliance and obtaining a massive economic bail-out is to be resisted and the conditions for lasting peace and prosperity created.

Now -- as the West is faced with the tantalizing prospect of the triumph over communist totalitarianism of ideals, values and institutions with which it has long been associated -- is not the time to shrink from the challenge. Instead, the United States must seize the momentous opportunity to press its considerable advantages toward the end of enabling the peoples of the Soviet Union and other nations of the Eastern bloc to express and fulfill the same, basic aspiration increasingly evidenced elsewhere: the right to live in a society of laws made by a free citizenry.

If the policy prescriptions contained in this Alternative "National Strategy Review" are implemented, the world may be able to realize an era of peace and prosperity without historical precedent. It is up to us to choose; it is time to act.

Senator BIDEN. Thank you.
Mr. MccGwire.

STATEMENT OF MR. MICHAEL K. MccGWIRE, SENIOR FELLOW IN FOREIGN POLICY, BROOKINGS INSTITUTION, WASHINGTON, DC

Mr. MCCGWIRE. Mr. Chairman, it is a pleasure to be here, and I would like to submit a separate paper for the record in due course.

Senator BIDEN. It will be inserted in the record.

Mr. MCCGWIRE. I obviously do have ideas about United States foreign policy toward Russia, but I want today to explain the military rationale, the doctrinal rationalizations for the changes that we are seeing in Soviet military policy, because I think if we understand that, we understand a lot.

Senator BIDEN. I am sorry, that are what Soviet policy?

Mr. MCCGWIRE. The underlying—the military rationalizations, the doctrinal rationalizations.

Senator BIDEN. That are going on within the Soviet Union?

Mr. MCCGWIRE. The things that have allowed the 500,000 men to be reduced, and that sort of thing.

Senator BIDEN. OK.

Mr. MCCGWIRE. I mean, why has it happened?

It is part of a process that started before Gorbachev, and I can see no domestic reason why they should be reversed, even if Gorbachev departs the scene tomorrow—and I will come back to that at the end.

They could, however, be reversed if there were major changes in the threat environment, and that is an environment that is largely under our own control.

The radical changes made by Gorbachev have, of course, caused us all confusion. We find it extremely hard to work out how he could have got from where we thought he was to where he seems to be now.

And because the new direction appears to be a reversal of Soviet military policy, we question the permanence of the change.

Now, I am not going to elaborate on the past, where we thought he was before, except to note that the Soviet negotiating objective for limiting or reducing strategic nuclear systems date back to the late 1960's. And although the style has changed, and the primary purpose of the objectives have changed, they in fact still promote their military interests, and therefore you are not going to have any military opposition to that—there is no military obstruction at the strategic level.

Instead, I want to go straight on to what has enabled Gorbachev to institute sweeping unilateral cuts, to accept true parity in Europe and greatly reduced force levels when, as you just mentioned, throughout the 1970's, he resisted this, or the Soviets resisted this.

The change has its roots in 1983–84, but the key decisions were taken late 1986, early 1987. It started in September 1986, when Gorbachev stated that perestroika would fail unless the energies of the people were directly engaged, through a democratization process.

These ideas were elaborated in his report to the plenum in January 1987, and the first 6 months of 1987 can be seen as the watershed in Soviet policy.

Gorbachev himself has said that before that plenum things were one way, and after it were another way. During those 6 months, the lines of battle were drawn, and what we have seen since then are just engagements in the ongoing internal struggle, with Gorbachev doing extraordinarily well, at least so far.

Now, if the first 6 months of 1987 were a watershed, the crucial decisions must have been taken in the last few months of 1986. It was at that period that a truly symbiotic relationship developed between domestic perestroika, the new political thinking about international relations, and military doctrine.

In the 4 months between his September speech, where he flirted with the idea of democratization, and the January plenum, Gorbachev had to line up his forces in the Politburo to gain acceptance of this concept of democratization, but he also had to face up to the implications.

Democratization meant political destabilization, and he would need to take whatever steps were possible to mitigate that danger.

What Gorbachev was proposing to do was to rerig the ship of state on the high seas, to restep its mast in midocean. And to be successful, three things were necessary: a calm maritime environment, a compliant crew, and preferably some kind of external assistance.

Now, we have evidence of all three measures—for example, emigration went up by a factor of 14 between 1986 and 1987. That is getting rid of the discontents from your crew.

But I want to focus on the Soviet-American relationship, because it was central to both the calm maritime environment and the possibility of external assistance.

In reviewing the relationships in the sort of October to November period, the Soviets appear to have concluded that in the past, they had been mistaken in allowing America to dictate the terms of the competition in military terms only.

And by responding in military terms, they have handed to the United States what they call aggressive circles, and provided the lifeblood to the military-industrial complex, both of whom depended upon a Soviet threat.

Meanwhile, they were sucked into a ruinous arms race, and played into the hands of those who sought to bring about the downfall of the Soviet Union through economic means.

Now, that was their diagnosis. The prescription was clear. First, dedemonize Russia. This was what Gorbachev was talking about a year or so ago, when he said he was going to deny us a threat.

Second, get out of the arms race, even at the cost of honor, or it is not fair, why should I give up 500 when the other side only gives up 100—although not, of course, at the cost of security.

And third, and most important, plan on the assumption that world war can and will be averted.

This last point was absolutely crucial, because without that assumption, arms limitations and reductions would not be possible. The Soviet threat would remain in place, from the American point of view, and without that assumption you would be unable to reap the economic benefits of massive arms cuts.

The point is this: as long as the Soviets had to place the possibility of world war in their plans, if they were not to lose that world war, they would have to defeat NATO in Europe. And this required, of course, that they should have to launch an offensive into Western Europe which required military superiority, surprise, defensive posture, and a permanent obstruction to arms control negotiations of the kind that we had in MBFR.

However, once you rule that for planning purposes, world war could and would be prevented, then military requirements will be shaped by some lesser objective, such as ensuring the territorial integrity and internal cohesion of the Soviet bloc. More than that, you have opened up the possibility of negotiating a mutual security regime for Europe, moving away from concepts of aggression, offense, defense, to one of security achieved by mutual agreement and political means.

This all fits into Gorbachev's new political thinking, but it also fits into his economic priorities. And it fits into the new military doctrine.

Now, this of course did not come out of the blue. It goes back to major review of defense and foreign policy that was done in 1983–84, and a key element of that review was the realization that in restructuring their forces in the 1970's to implement the new war plans, they would introduce them for a nonnuclear strategy in the event of war, they had incurred massive political costs, very heavy economic costs, and worst of all, military costs.

They had refocused U.S. attention on Europe, and sucked in Pershing II, and the whole Euromissiles, which threatened their operational plan in the event of war.

Meanwhile, they had increased tension, they had raised U.S. threat perceptions, and encouraged a swing in U.S. policy.

In other words, in preparing for war that they absolutely wanted to avoid, but could not afford to lose, they had made that war, the world war, more likely. And they had also made it more likely that if it came, they would not be able—they would in fact lose it.

Now, of course, if in preparing for war you want to avoid you make it more likely, the logical outcome is that you cease preparing for war. But that is a very major step, and was a pill that they could not swallow in 1984.

Instead, they addressed the symptoms, which was that they thought the political discontent came about because of their offensive posture in Europe. If they changed to a defensive posture, this would remove that problem, and by reducing tension, they would then be able to get arms control started up, and mutual reductions, from which they would get economic benefits.

As Akhromeyev told us, it took them 2 years to work out the details, and they announced it as a Warsaw Pact statement in May 1986—what they called the Budapest Appeal.

But note that the contingency was still world war, and the requirement was still to be in a position not to lose that war, should it come.

They still required superiority, and could not make unilateral cuts. In military terms, they needed an even greater margin, since they would lack the advantage of surprise, and would start from a defensive posture.

Now, this is a situation Gorbachev faced in the middle of 1986, when he faced the possible failure of economic perestroika, and the need for radical measures, including democratization, including a major reallocation of resources from defense into the domestic sector, and including his ideas of greater reliance on political means for ensuring security.

It was in those circumstances that the Gorbachev leadership took the doctrinal argument to its logical conclusion. If preparing for world war makes such a war more likely, then cease preparing for world war.

Note the important distinction here between world war and war. The Soviets are not planning on the assumption that war can be prevented, at this stage.

They have, however, reached the conclusion that, through diplomacy and other means, world war can be averted. And the political leadership has told the military to plan on the assumption that world war can and will be prevented, and instead to focus on ensuring the territorial integrity of the Soviet bloc. That point is crucial.

Senator BIDEN. Excuse me, is it implicit in that assumption, that we, the other side, have no aggressive intentions?

Mr. MCCGWIRE. The thing that has driven the Soviet military requirements since the late 1950's has not been the presumption that America had an urge to attack Russia, but the possibility of world war that was inherent in the antagonism of the two systems, and that war would come about, like a Sarajevo situation.

They have not been thinking in the Munich-type way we have been thinking. It is that it is something that is inherent. They have now come to the very radical conclusion that various social forces in the world—also, having met President Reagan in Geneva was an important step—that between the two countries they would in fact be able to avert world war. And a major contribution to that will be themselves getting out of the business of being prepared to fight it.

And in fact, Gorbachev has said this, to an extent. I mean, to paraphrase him, he said that for 3,000 years, if you wanted peace, you prepared for war. That does not work in the nuclear age.

Today, if you want to avoid world war, you do not prepare for it.

Now, finally, on what basis do I claim that this new policy is unlikely to be reversed as a result of domestic developments—and I emphasize that: domestic developments.

Soviet requirements, as I said, since 1948 have been shaped by the possibility of war between the two social systems. Now, over the years, this requirement has gotten larger and larger and larger. In the 1950's, you might say, it was improve World War II, in the 1960's you introduced the cataclysmic element of a nuclear exchange. In the 1970's they tried to move away from that.

In fact, it got more demanding as they went to conventional means. And then, as you come into the 1980's, emerging technologies—it is an arms race without an end, and an expanding curve in the face of them.

So, more important than that is that the more you engage in this, the further you are away from your objective of avoiding the catastrophe of nuclear war. You are in fact making it more likely.

Now, that requirement grew out progressively—sucked in is the wrong word. You rode that particular expanding curve, and then you finally say, "This is ridiculous."

That is what Gorbachev has done. He is the courageous man who has done it, and made that decision. Then you redefine the nature of the problem.

The problem is not going to be world war. I then challenge anybody to develop a domestic impetus that could cause some future leadership to redefine and reshoulder that burden.

I mean, I would say this an extreme case: postulate Ivan the Terrible married to Catherine the Great with Stalin as their Prime Minister. In other words, it does not matter what the domestic political structure in Russia is. There is nothing internal that would cause them to reshoulder the concept of world war, as it was defined by the end of the 1970's and the early 1980's.

Senator BIDEN. Why not just redefine it?

Mr. MCCGWIRE. Pardon?

Senator BIDEN. Why would they not just redefine it? Just as Gorbachev redefined it?

Mr. MCCGWIRE. Well, because—wrong word, "redefine." To reshoulder the burden that existed as it did in the early 1980's.

Now, they would reshoulder it if they thought that they had been wrong, and that in fact there was the possibility of world war. But there is not a domestic impulse, you see? It would have to be an external impulse.

Senator BIDEN. I see.

Mr. MCCGWIRE. So, I close on that.

Senator BIDEN. Thank you. That clears it up for me.

[The prepared statement of Mr. MccGwire was not available at the time of printing.]

Senator BIDEN. Doctor, welcome. It is good to see you again. Thanks for coming.

STATEMENT OF DR. JOHN D. STEINBRUNER, DIRECTOR, FOREIGN POLICY STUDIES PROGRAM, BROOKINGS INSTITUTION, WASHINGTON, DC

Dr. STEINBRUNER. Since it is late in the day, I do have a prepared statement. Let me submit it for the record.

Senator BIDEN. Do not worry about the time. I am anxious to hear what you have to say. But I will see that your entire statement will be submitted and placed in the record, as if read.

Dr. STEINBRUNER. OK.

Let me summarize what it says, and begin picking up with what Mike MccGwire just said.

I think that for the reasons that he summarized and that might be elaborated that we have seen the evolution of a very different security conception in the Soviet Union, positing a different form of threat than what we have been normally thinking about, and I think they are essentially correct in the nature of the danger.

It has to do with the interaction of forces, rather than the deterrence or defense of calculated aggression, and that is a serious danger that they are accurate in their assessment of the nature of the threat, both to their society and ours.

And there is a very systematic program afoot for reducing it. I think that we have underestimated both the seriousness of their purpose and the systemic way in which they are going about implementing it, and ultimately the political appeal this is bound to have in the West, in part because it is very much in our own interest as well.

And we have been very sluggish in our response, which I think needs to be not the skeptical prove-it-to-us variety that we are trying to do, but a process of shaping the outcome to give it the kind of detail and endurance that we would want it to have.

And if we fail, continue to fail, to be in that posture of shaping the outcome, rather than appearing to resist it, we are in very short order going to be in very deep political trouble in our own alliance, and so it is not only an opportunity, it is getting to be a political mandate for us to turn in a much more constructive performance.

With that said, my statement comments on the practicalities of doing this, and points out——

Senator BIDEN. Helping to shape it?

Dr. STEINBRUNER. Shape the outcome.

Senator BIDEN. That practicality of shaping the outcome?

Dr. STEINBRUNER. Shaping the outcome.

We are facing a prospect of greatly improved security at reduced force levels, and reduced cost, and that is, to put it mildly, a compelling proposition.

We understand it, in part, in terms of our own domestic economic prospects or situation, which obviously makes it interesting, but also, we are encountering here an argument about the threat to our own security—the threat is different than the threat that we have appreciated, and I think, basically accurate.

It is not the Soviet Union, really, contemplates deliberate aggression, but a very serious war could arise out of the interaction of

current forces, which are unfortunately configured for very rapid offense in the initial stages.

That definitely could get out of control under crisis situations. That is what they are trying to stabilize. They are correct, probably, about the true nature of the threat, both to their society and our own.

In other words, they are likely to be very convincing, in first instance, to our allies, and ultimately to their society as well.

So, I am proposing that we are encountering here a much more serious conceptual and political, if you will, organizational momentum than we have yet appreciated, and our response is yet not commensurate with it.

All right. Now, as a practical matter, the first element in that response probably will have to be to proceed with the START Treaty as drafted. I have heard a number of arguments along these lines. I am noting simply the practical ones: the treaty is substantially drafted, and as a matter of fact, these weapons, in addition to being the most destructive ones, are also the ones that are inherently easiest to control, in part because the control mechanisms within each society are much more strongly developed than they are for the other kinds of forces.

And that internal control mechanism enables, as a matter of fact, mutual control somewhat easier than it is with regard to the conventional weapons, which also, I think, need control—and that can be achieved.

What I am suggesting, though, is that for these very practical reasons it will be necessary, probably, to proceed with the START agreement as drafted, as the first stage of a process that is intended to lead, I think, to force reductions in both the strategic and the conventional areas.

Having said that, let me note that there are two problems and two arguments that are encountered along the way. One is the issue of the relationship of constraints on ballistic missile defense technology in connection with offensive reductions, which have already been discussed at the hearings.

In sitting through the hearings, what I did not hear as yet is a point that I would emphasize: regardless of the position of the Soviet Union, the United States itself, when all the rhetoric is swirled about us, in the end will have to insist on a reliable control on defensive ballistic missile technology, if we are going to reduce our own offensive forces.

We, in the end, are not going to go through an offensive force reduction unless we are sure that the Soviet Union is constrained by the principles of the ABM Treaty indefinitely.

And there is no amount of domestic political rhetoric that is going to override this fundamental point. In the end, basic national interests do come out, and are imposed, and this is ours.

So, even if the Soviets should somehow fail to make the point, which I do not think they will, we would have to do so ourselves.

That is, that there is an unbreakable relationship between the continued restraint on defensive missile technology and offensive force reductions. Now, I am aware that passionate advocates of the SDI program claim that this is inconsistent with their goals. In my statement, I explain why I do not think it is inconsistent at all;

indeed, there is no prospect for their goals whatsoever except in the context of a mutual agreement.

This is a false issue, although rhetorically very effective so far.

In addition, there is an issue with regard to cruise missile, submarine-based cruise missile deployment. I do not think that is quite as fundamental a question, but again, it really is much more in our interest than in the Soviet interest to impose some kind of control on these weapons, for reasons that I explain in my statement.

Senator BIDEN. Why do not you speak to a few of those for a moment?

Dr. STEINBRUNER. Well, there are two basic ones. Those weapons are inherently easier, ultimately, to use against the United States than they are to use against the Soviet Union, because of the open ocean access to the United States, and the relative distribution of interesting targets near coastal areas.

In addition to that basic geographic fact, we do not have an early warning system at the moment or in prospect that can give us tactical warning of a cruise missile attack. We have not designed such a system, we have not planned it, we are not projecting it, we do not have it.

Given those facts, it is very much in our interest to control that technology, and in the course of negotiations so far, it is an anomaly that we have really not been pursuing that interest as aggressively as it appears we ought to.

Senator BIDEN. Are you talking about sea-launched cruise missiles, or sea-launched ballistic missiles, or both?

Dr. STEINBRUNER. Cruise missiles, cruise missiles.

Senator BIDEN. I am sorry, I missed that.

Dr. STEINBRUNER. Sea-launched ballistic missiles are, of course, included under the restrictions of the START Treaty as drafted.

Senator BIDEN. But your concern relates more to sea-launched cruise missiles?

Dr. STEINBRUNER. Cruise missiles. We do have some warning against ballistic missiles; we do not, against cruise missiles of the variety that are now being deployed.

The point is now being insisted upon by the Soviet Union, and somewhat resisted by the United States. That, I think, is an anomaly in our position, and it might be maintained under any given administration for some period of time, but when the country as a whole comes to examine its true interests, as it will in the course of examining any proposed treaty, this point is likely to come out and play some role.

With that said, I think that that issue probably could be delayed to a subsequent round of an initial START Treaty.

And, of course, you have to anticipate subsequent rounds. The initial treaty really sets a framework for strategic force restraint. It does not accomplish much, actually, other than setting the framework, which is very important.

The reductions in visage will not meaningfully reduce any military mission that we can now perform. In other words, we could do all the missions with the residual forces envisaged under this treaty.

Those two issues, the ABM Treaty and the cruise missile issue, are well defined in the diplomatic history of it, and are bound to arise in the course of completing the treaty, and have to be resolved or explicitly delayed in some sense.

Most recently, there are two additional arguments that have arisen in the NATO context that have some apparent potential to delay the progress of the START Treaty. The burden of my testimony is that neither of them really has this potential, neither of them are destined to be very serious objections.

One has to do with the thought that there must be conventional force reductions before we could accept the strategic force reductions envisaged in the treaty. I point out a fact in my testimony that is widely ignored in the discussion, but it remains a fact nonetheless, that it is primarily U.S. strategic forces to provide the extended deterrence protection against the conventional invasion of Western Europe, in the minds of any serious opponent.

Only those forces really have the combination of capabilities really required to perform those missions, and that despite the fact that NATO lore and intense political ideology holds that it is important to have forward deployed weapons for symbolic reasons, they really do not have an irreplaceable or even very important military consequence.

If we actually had to perform extended deterrence missions to resist an invasion of Western Europe, we would have to do it with U.S. strategic forces. They are the only ones that have the overall capability to do that.

That means that the forward-deployed theater nuclear weapons really are—their function is symbolic, to provide sign or symbol of U.S. commitment to doubting allies. If they continue to perform that function, then to the extent that they do so, they might be desirable. Clearly, however, when they have the opposite effect, they are absolutely undesirable, and they are not, again, militarily necessary.

That means that our current position on this subject is unwise in the extreme. To refuse negotiations against the inclination of the Germans, who are the primary recipients of the symbol, simply does not make sense at all.

That position is bound to fail. The only question is, how gracefully will that happen, and how easily will we back out of this position?

Finally, let me just note that the argument that there is any necessary connection between conventional force reductions and strategic force reductions simply does not hold. The underlying military reality will be that even should we reduce strategic forces far beyond what the current draft treaty envisages, that the extended deterrent mission, which provides some protection against conventional invasion, will be just as secure as it now is. It is really a constant in the strategic equation.

You can neither take it away, nor can you enhance it much. And that is the hardcore reality.

Given that fact, there is no reason to attempt cross-linkage. It only complicates the negotiations. It only adds to the impression that our purpose really is to retard them, rather than to promote them, and let me end by saying that impression which we are

courting in Europe is extremely dangerous to our position in the alliance.

If it is believed that we are really trying to preserve the cold war, because that is what we recognize and are comfortable with, and we think that our political position is based on that, then we are going to be in very deep trouble very quickly.

We have got to project our own form of a more constructive political order, and we have to act as if we really want to bring that about, or we are not going to have very loyal allies very long.

[The prepared statement of Dr. Steinbruner follows:]

PREPARED STATEMENT OF JOHN STEINBRUNER

It is an honor and a pleasure to testify before the Senate Foreign Relations Committee. As is customary, I do so as an individual and not as the representative of any organization.

The topic of these hearings is a matter of active concern in the professional community. There is a common perception of opportunity. Current Soviet policy explicitly envisages a drastic reduction and defensive restructuring of military forces to produce improved security at lower cost for both alliance systems. Given prevailing fiscal imbalances and pressures for improved economic performance, that proposition is as compelling to the Western democracies as it is to the Soviet Union. There is also a common fear, less explicitly formed but palpable nonetheless, that United States policy has been inappropriately sluggish in recognizing the importance of the opportunity and insufficiently assertive in developing it.

Though I am not sure how many others would share the judgement, I personally believe this sluggishness is at the point of becoming a serious threat to the international stature of the Unites States and to the cohesion of our alliances. Despite widespread talk about the ending of the Cold War, its characteristic attitudes and security principles so dominate current American security policy that we appear incapable of evolving a more constructive conception of political order. To project that impression indefinitely is, in my opinion, to surrender international leadership and to damage the most fundamental security interests of the United States very severely.

Naturally I hope it will not come to that. I hope as well these hearings will contribute to a corrective adjustment.

The circumstances that create the opportunity for major arms reductions and the imperative to respond to it constructively are very general in character. They have to do with the remarkable development over recent decades of an integrated international economy and with the strong stimulus for realignment and improved performance thereby imposed on all national economies. They have to do as well with the maturation of military power and the simultaneous restriction of its significance. In conceptual terms, at least, the Soviet Union appears to have grasped the implications of these

global trends, and they have quite clearly developed a leader with the boldness and vision required to redirect Soviet policy. The ultimate outcome, of course, is still very much in question. We must realize, however, that our own actions are a very significant part of this question.

Though I cast my remarks in this broad context with as much awareness of its many dimensions as I can muster, I will focus them on the more specific questions of strategic weapons reductions. Because of the powerful capabilities of strategic forces, their disposition is inevitably a central element in the new Soviet security conception and in the U.S. response, whatever it turns out to be.

There are practical reasons to believe that strategic forces might have to play the leading role in the general redesign of international security arrangements. A treaty to accomplish strategic force reductions has already been substantially drafted, whereas the process of negotiating a corresponding reduction of conventional forces is in a much less developed stage. The special character of nuclear weapons, moreover, has all along required unusually strong measures of control within each national military establishment and that basic fact gives inherent advantages in devising effective mechanisms of agreed international restraints. It is apparent that agreement on the most destructive and most controllable weapons would facilitate broader arms control arrangements. It is also prudent to assume that failure to enact the most obvious and compelling constraints on strategic weapons would retard progress on all other issues.

The prospective agreement on strategic weapons reductions as drafted in the course of negotiations to date would produce a proportional reduction of intercontinental range strategic missiles to levels approximately 50% of current deployments. Because of counting rules for weapons carried on aircraft, the overall strategic force reduction would be significantly less--on the order of 25-30%--and the proportion of aircraft-delivery weapons in the residual forces would be increased. Reductions of this size and composition would have very little effect on the capacity to perform basic strategic missions. To a close approximation the threat to military and industrial infrastructure in both societies would remain equally severe and the relative capability of one side to damage the deterrent forces of the other in an initial attack would remain essentially as it is under

current force deployments. The significance of the agreement therefore would be contained in the prevention of yet more threatening future strategic force deployments, in the general political expression of restrained intention, and in arrangements for control and verification that might provide the basis for more binding mutual restrictions in the future. Although these matters are abstract and difficult to dramatize in public discussions, they are nonetheless very important in the difficult business of devising a more stable military balance. Basically I urge the committee to encourage epeditious completion and enactment of the draft START agreement and to anticipate subsequent negotiations for more binding strategic force restrictions.

There is a least one fundamental issue that must be resolved if the prospective START agreement is to be completed. To put it simply and starkly, neither the Soviet Union nor the United States can responsibly agree to reduce their strategic offensive forces unless the conditions for testing and deployment of missile defense systems are also strictly controlled. In practical terms that means at a minimum that the ABM treaty under its original, strict interpretation must be reaffirmed as a condition for offensive force reductions. The central feature of that treaty is a procedural rule that any testing deployment of defensive systems must be regulated by mutual agreement. Since the rule has been challenged by unilateral declarations of intent by the United States in connection with the SDI program, it will have to be reaffirmed in some way if strategic force reductions are to proceed.

As you are all aware, that provision has been aggressively resisted by the most intensely committed advocates of the SDI program, who have argued that the ABM treaty and its central rule are incompatible with the program's goals. In fact quite the opposite is the case. There is no meaningful prospect for the deployment of missile defense technology unless its performance is protected by offensive force restrictions and unless the basic features of the deployment are legitimized by mutual agreement. Otherwise countermeasures would be taken that would probably prevent deployment in the first place, would certainly negate its intended effect, and would introduce a serious instability in the strategic balance.

For these reasons reaffirmation and indefinite continuation of the ABM treaty will in the end be required by the United States as a necessary condition for offensive force reductions, even in the very unlikely event that the Soviet Union should abandon their current insistence on the point.

Beyond that, it is evident that the current provisions of the ABM treaty must eventually be supplemented in order to clarify regulation of current technology. The testing of chemical rockets, directed energy devices, and various sensing technologies encounters significant ambiguities or direct loopholes in the current rules, particularly when anti-satellite operations can be claimed as the underlying purpose. Anti-satellite weapons themselves pose a significant threat to the stability of overall military balances that ultimately will compel explicit mutual regulation. The fact that these technologies involved intersect ballistic missile defense technology adds to the incentive for clarifying improvements in the ABM treaty as offensive forces are reduced.

In negotiations to date the Soviet Union has also insisted on the independent regulation of sea-based cruise missiles as a condition for proceeding with the prospective START treaty. Though not included in the treaty, these systems can perform strategic missions, and without regulation they would therefore become a legal means of by-passing the purposes of the agreement. Again, the reasons for the United States to insist on sea-based cruise missile controls are at least as compelling as they are for the Soviet Union, if not more so. The United States has greater exposure to open-ocean approach and has no system that would give adequate tactical warning of a cruise missile attack, either in existence or in any projected defense plan. These basic facts indicate an interest that is much stronger than has yet been expressed in our negotiating position, but technical schedules are such that we might be able to proceed with a START agreement without complete resolution of the question. The Soviets have said, however, they would not proceed without a resolution of the issue. Given our own history of exploiting gaps in weapons system controls, they might well be serious about that.

Within the NATO alliance and the domestic U.S. debate, two other issues have recently been advanced as necessarily conditions for a START agreement.

It has been suggested that an equalization and reduction of conventional forces would have to precede strategic force reductions lest extended deterrence be weakened. In a related argument it has also been suggested that in the aftermath of the INF treaty the legitimacy of the remaining tactical nuclear arsenal in Europe must be affirmed and the right to modernize it established before any additional arms control measures could be contemplated. Neither of these arguments corresponds to underlying military realities that in the end tend to determine the content of agreements after all the emotional rhetoric has been expended. Without this anchoring in serious interest, both arguments appear destined to be swept aside in the tides of European political opinion.

The traditional conception of extended deterrence requires a capability to threaten any attempted conventional invasion of Western Europe with a decisive use of nuclear weapons. To be credible to the opponent, such a threat must be very limited in the number of weapons involved, lest collateral damage in Western Europe create an apparent self-deterring effect. Credible threat must also be exercised by weapons that are invulnerable to conventional interdiction and capable of very sophisticated targeting, very precise timing in their operations, and very accurate delivery. U.S. strategic forces operate the only weapons that combine those characteristics and therefore to the Soviet Union they pose a credible extended deterrent threat, whatever NATO members choose to think or say about the question. That threat would be unaffected by the strategic force reductions projected by the START agreement since the number of weapons in question is inherently very small. Extended deterrence is essentially a guaranteed constant in the overall security situation that will neither be decreased by any prospective arms control arrangements nor meaningfully increased by any realistic improvements in the tactical weapons arsenal.

These stark facts mean that the tactical nuclear weapons arsenals in Europe have no essential, irreplaceable military purpose. They have traditionally been important as a symbol of the American strategic commitment to doubting members of the NATO alliance. In that role they have promoted alliance cohesion and should be judged entirely in terms of their continued ability to do so. Obviously if they come to have the opposite effect, they should be removed. It is therefore unwise in the extreme to

refuse negotiations for mutual reductions of the remaining tactical weapons arsenals against the political inclinations of the Germans whose territory is the major potential battleground and who are therefore the primary recipients of the symbol. The current American position, which does just that, is bound to fail and the major question is how graceful the necessary changes in that position will be.

For similar reasons there is no serious requirement to make the completion of the START agreement depend upon progress in conventional arms negotiations. These negotiations now have their own very substantial momentum whose driving logic is to balance and to stabilize forces according to some agreed calculus of conventional interactions. There is very little cross-leverage from the strategic force negotiations that is either needed or feasible in this process, which will be difficult enough to handle without unnecessary complications. Because that fact is readily apparent, attempts to assert linkage are likely to be read as confirmation of a suspicion that the underlying purpose of the United States is to prevent rather than promote a realistic outcome in order to preserve the traditional military confrontation in Europe. That suspicion is truly dangerous to the political credibility of the United States and to the integrity of our alliance arrangements.

Senator BIDEN. You have a serious problem, Doctor. You are too coherent. It throws us off up here.

Let me begin where you ended. Some argue, and I must tell you that it has crossed my mind, that one of the reasons why we have not had more of a response from the Bush administration on a number of items relating to foreign policy and the Soviet actions has been that there is an underlying fear that abandonment of the cold war will bring about instability, that there has been stability for 44 years with occasional blips—but nonetheless stability.

By ending the cold war, you run the risk of ending that stability. There are those in this administration and on the Hill who say that they are for arms control, that they are for changing the dynamic in Eastern Europe, that they are for lessening the crisis sort of management with the Soviet Union.

But when you get right down to it with them, they are also for maintaining the cold war, because they do not know what the heck to put in its place.

And I am not trying to be pejorative when I say that. I think that is part of the dilemma. I am not even sure if they—I may be presumptuous to say this—I am not even sure they know that is the problem.

But no matter how deeply I dig with people I have great respect for, it seems to come back to that.

Is it not true that we are moving into a dangerous period, although a period of great opportunity—but a period of danger, where we are going to have to, in effect, build a new framework of relationship within which our relationship with the Soviet Union will be exercised?

And it could theoretically be more unstable than what we have now, would you not grant that, that it could be more unstable than what exists now?

Dr. STEINBRUNER. In principle it could be.

But I again would point out, I think, to a degree that we have not realized, we are encountering in Soviet security policy, which plays off some themes that they picked up in Western literature, a program for stabilizing in a way that we have not fathomed or understood.

When we say "stability," we have in mind stability against a calculated aggressor, calculating aggressor, who is assessing the relative benefits of initiating an attack and making a fine calculation as to whether it is a good idea or not.

When they say "stability," what they say, basically—and I think they are correct on this—is that that problem has been solved. The cold war has done that, and will be incorporated in any new order in that sense.

We will continue to deter and defend against calculated aggression on both sides, very powerfully. It has created a different kind of stability that is far more dangerous, and that has to do with the interaction of the forces that are doing this deterring and defending.

Those forces at the moment are committed to very rapid offensive operations should any engagement begin, and you have got this very complicated process of alerting and massive flows of information that go between them that could readily trigger exactly that, even though neither side really wanted it.

That is a danger that we have not recognized or credited much.

Senator BIDEN. Well, I would go a step further, and please, any of you, do not hesitate—I would invite your criticism of what I am about to say.

It seems to me that it is almost out of our hands now. In my view, the Soviets have made a calculated judgment to, essentially do what Mr. MccGwire said, they have made a calculated judgment that a world war is no longer inevitable. It is not likely to be initiated, and can only come about as a consequence of miscalculation. The best way to deal with that miscalculation is in fact to begin to take, assuming they mean what they say—and that remains to be seen—to begin to build down, to use Mr. Dean's phrase.

And if, in fact, they have decided that, it almost does not matter what the heck we decide, because Europeans have already made their decision. There is no way, in my view, that if the Europeans conclude that the Soviets are serious about "building down," that the Europeans are not going to engage in that arrangement, regardless of what we say or what we do.

Now, would anyone, accepting the premise, disagree with the conclusion that the Europeans are going to move with or without

us? And that is the one way to break up NATO, if the premise is correct.

Start with you, Mr. Dean.

Mr. DEAN. I think that your starting point is correct, Senator, that the Soviet Union has decided to make this builddown, more or less regardless of whether it is in negotiated form or not.

I think certainly preponderant European opinion would feel that the offer should be taken up, and to me, it is very important whether this be done in—the builddown—in a disorderly, unorganized way on the Western side. With negotiated reductions we can get more reductions, we can get some hold over the future, and deal with this problem of uncertainty about the future of the Soviet Union, that we can avoid the abrasion and the erosion which an uncoordinated process will bring in NATO.

I think nothing will kill the willingness to cooperate together more than competitive unilateral reductions.

And I think we would also, through a negotiated outcome, give an endorsement to the changes within the Soviet Union. I think that no one wants to give away something or do something without a material return, and I think the politically interested Soviet public would feel that the present reform policy would be confirmed.

Senator BIDEN. Being the devil's advocate, what difference does it make whether that endorsement occurs or does not occur?

Mr. DEAN. Well, I think it is in our interest that the present policy does continue. There has been the change here—I would not identify change with instability, as was implicit in some of your remarks.

Senator BIDEN. It was—it is.

Mr. DEAN. Change could be reduction of danger—we were certainly heading in a situation—toward a situation of nuclear accumulation. The next step in Europe certainly would have been the deployment of a large number of conventionally armed, tactical range missiles, which I think would have——

Senator BIDEN. Well, by my definition, that would have constituted change, also. My point is, what I hear so often, regardless of with whom I speak, and I do not pretend to have the expertise of any of you gentlemen—but having tried to learn about this area, and spending the last 14 or 15 years chairing this subcommittee and meeting with a lot of folks over there, as well as here, there seems to be this notion that—and you hear it stated 1,000 different ways—there has never been such a sustained period of peace in Europe.

That is how it starts, which is true. NATO is working and has worked.

And what is not said after that is—"and I am basically afraid to change that, because I do not know what the hell to replace it with."

Mr. GAFFNEY. May I address that, Mr. Chairman?

Senator BIDEN. Maybe Mr. Gaffney wants to respond, and then Mr. MccGwire.

Mr. GAFFNEY. I tend to think that you are absolutely right, in one respect, and that is that I think on both the right and the left, frankly, there is an uneasiness about instability, and I guess what

may be somewhat radical, and perhaps why you put us outside that box is——

Senator BIDEN. I did not mean you were radical. I think you start off with a proposition. I think it is a bad idea, period.

Mr. GAFFNEY. No, I am using the term myself, I think, in a constructive way.

I think what is radical about the kinds of recommendations that the Center has made is that they do suggest an approach that runs the risk of instability, yes, but is aimed at creating out of this a potential opportunity for change that will result in improvement in our situation, and is calculated, I think, to do it in a way that manages the risks. It is not an open-ended thing.

It is, however, in stark contrast to what I see as sort of the emerging lowest common denominator view, whether you are on the right or on the left, which is: Give them the money; give them the technology; give them the arms reductions or the restraint in our defense budget or what have you, in the hopes that Gorbachev will succeed, and that will reproduce, out of the potential chaos, stability which will be in our interest.

If I could just follow that up with one thought, because you specifically asked the question, and I think it is absolutely the right question—Do we have a choice?

We have two major events coming up in the next month or so: the NATO summit and the Paris Economic Summit.

These are two golden opportunities for the United States to press the test with its European allies, to lay before them its agenda, its strategy for trying to manage this instability by bringing about constructive change, and not simply saying, "Oh, my God, it is scary, and we do not want to do it."

You are right, I think. What will happen in the vacuum of American leadership will be everybody going their own way, a German payola scheme for refugees, even Maggie Thatcher giving them high technology in exchange for some jobs, and so on.

So, I think this is an opportunity which frankly the Senate of the United States has expressed itself on several times, very forcefully and very sensibly; namely, use these opportunities to lay out an agenda and try to bring about a multilateral program, and common alliance position to move our agenda forward together.

I think it can be done.

Senator BIDEN. But we all seem to be in agreement on one thing, that right now, this administration has not articulated its view of what it would like to see Europe and the Soviet Union look like later.

I would just make two points. I think that it should be stated, unless—and correct me if I am wrong, I speak for myself.

I for one do not think a sound, hard-baked arms control policy necessarily requires a policy that decides that credits, guarantees, and flows of technology and economic help are behind it.

I find them inconsistent. My policy, that I have been attempting to articulate, is that there is an arms control component that should be negotiated along the lines that your colleagues have been discussing. At the same time, a clear signal to the Soviet Union as well as to Eastern Europe that you have got to work yourself and your way out of your own economic difficulties, we are not going to

do it for you, therefore do not look to credits and do not look for concessional aid.

Quite frankly, I think it is one of the only ways we are going to bring down those illegitimate regimes in Eastern Europe, is by them having to be in the position of having to take responsibility for what they have wrought, because I believe the Soviet Union has basically said, "Hands off, you are on your own." So they can no longer turn to the Soviets and say, "The Devil is making me do it."

They are on their own, in many ways. But I should not be telling you what I think. I just want to make it clear that I do not think the two follow, nor do I think that anyone has suggested it—although some of your colleagues may in fact have a different view on economic assistance than I have in a very, very, very rough way, just attempted to begin to articulate.

So, I hope we do not confuse the two things. And one other point that I would like to make—and then yield to you, Mr. MccGwire, because you have been very patient here, waiting for recognition—and that is that just as you have pointed out, Mr. Gaffney, that equality, even inequality in arms, has not in the past, in and of itself guaranteed or in many cases even enhanced the prospect that there would not be war.

I would argue that the lack of, the existence of a freer, more democratic society has also not in any way guaranteed that there not be war. You seem to assume——

Mr. GAFFNEY. I have not done the analysis myself, but I did have it asserted to me very authoritatively the other day by somebody at Hoover, I believe, that in the analysis that they have done, they have never come up with an instance where democratic countries—democratic countries—have gone to war.

Now, that is not to be confused with countries that are not democratic going to war with democracies—there is ample experience of that.

But I offer that to you as an interesting research project for CRS or your excellent staff.

Senator BIDEN. But at least you will admit——

Mr. GAFFNEY. It is an interesting thesis.

Senator BIDEN [continuing]. That it is a precondition. You must—that must be, in fact, true, for your thesis to have relevancy beyond just wanting to be altruistic and help free peoples all over the world, including within the Soviet Union.

Mr. GAFFNEY. It is central to our paper; yes, sir.

Senator BIDEN. OK.

Now, Mr. MccGwire.

Mr. MCCGWIRE. Thank you.

Our colleague Ed Hewitt, who is an economist, specialist on the Soviet Union, would thoroughly agree with what you said about helping the Soviet Union

Senator BIDEN. The reason why—let me—I am very, very careful about attributing everything these days.

I have spoken to 100 people, and I want to make the point that Professor Hewitt was one of the people with whom I have spoken.

I think that I had the view, even before I spoke to him, but it may have been either reinforced or possibly originated—with him both here and in private. Please, follow up.

Mr. MCCGWIRE. I would love to get CRS to look at that claim about democracies. I have heard it frequently, and running through my own mind, it very much depends on how you define "war" and how you define "aggression." I am not quite sure what taking over half of Spanish Mexico was—it struck me as a war, and we were a democracy at that time.

Now, I would like to go back to your question of this one stability and danger, but come at it a little sideways.

There is a big difference between the way the two sides are arguing. The Soviets are saying at the moment that by reducing forces, you make war less likely—that is essentially their argument.

We still believe in deterrence theory, which says the more we put in, the less likely war is, and the too very radical difference, and that is one of the problems. I mean, essentially what Frank is talking about always is deterrence, and they are approaching it from a different point of view.

Now, you said that mutual reductions really will happen anyway. Yes, unilateral so far—and incidentally, the Soviets do not want——

Senator BIDEN. Let me make it clear, I do not mean mutual between the United States and the Soviet Union per se. What I am suggesting is reductions will occur in the remainder of the NATO countries, save possibly England, for the next several years, whether or not we in fact engage, and I think we will be expedited, speeded up, the more we give the message that we are not willing to negotiate.

Mr. MCCGWIRE. Yes, I think that is very true.

And I would make one point—I do not think the Soviets want the United States out of Europe, despite what Frank Gaffney says. Since the end of the 1950's, they have not wanted that—they want you in. And they would like you to stay, for good military and political reasons.

The one problem we are going to get into, which ultimately this question of sufficiency which they are arguing at the moment—which is not sufficiency for throwing America off the continent, it is sufficiency for the territorial integrity is that at a certain stage, the argument must depend upon the threat environment, and we are that threat environment. It has got to be a mutual process.

I would like to suggest—we must distinguish also between stability and danger. I would argue that for the last 40 years, you have had a highly stable situation, but a highly dangerous situation. We talked about crisis stability, brinkmanship, and things like that. It really was dangerous.

Now, we are moving into a very unstable situation, but if we get everything down, it will be a much less dangerous one, and I do not—I think that we have made a mistake to link those two terms, "stability" and "danger."

Senator BIDEN. Good point.

Mr. MCCGWIRE. Finally, on this question of force reductions, the way I find it useful is to think of where is everybody trying to go?

We are trying to go to—at least where I think we are trying to go to—a mutual security regime in Europe.

Senator BIDEN. I notice when you do not like certain things, you say "you," and when you like certain things, you say "we."

Now, let's figure out who the hell you are.

Mr. MCCGWIRE. I am sorry. I am——

Senator BIDEN. I am teasing. But you notice, you do do that.

Mr. MCCGWIRE. Just wait until you hear me saying "we" when I am talking about the Russians, and that will really confuse you, when I am trying to look at their point of view.

No, mutual security regime—where I think we all are trying to get to is this mutual security regime. And we start off in a position of a capability threat. And we still have to worry about the capability threat. We want to try and get there.

The question is, how do you get across? And it takes at least three stages. The first stage, they have already embarked on unilateral cuts. Then you get the question of reductions, but it is not a vertical process. We have got to get from here to there.

And finally—and this is the most important thing—at some stage, you have got to shift your weight from one side to the other side, and that is what we find extremely difficult.

I mean, when you are crossing a river on stepping stones, at some stage, you have to go to the other bank, and we have got to, at some stage, say that deterring war, as we thought in the past, or defending, is less important than creating this new situation.

Now, one hopes, as one makes that step, one has structured the situation so that in fact there is very little danger. But it is going to be an attitudinal change—very important.

Senator BIDEN. I understand what you are saying. I am not sure I agree with that.

Mr. MCCGWIRE. Oh, good.

Senator BIDEN. Let me pursue that for a minute.

Let me preface my question, because it may make more sense, and because I will probably not be able to articulate this well enough, so you will have to help me out here.

When I was meeting with General Galvin and his counterparts, and then with the permanent reps, all of whom you spent a lot of time with, Mr. Gaffney, I asked the following question, and it related to sufficiency.

Everyone was talking about 90—the debate when I was there, 7 or 8 weeks ago at NATO for 3 or 4 days, was what is the irreducible minimum, beyond which we cannot move, in terms of NATO, in terms of total force structure?

And although I understand the complications with the Turks and also—by that, I do not mean that on the record to imply that the Turks are not—but the Turks worry that as you in fact pull more out of the central region, they are going to be left the odd man out, and they are going to still be the most vulnerable, et cetera.

But separating all those kinds of arguments, pulling all those out, there was, it seems to me, a consensus among the people with whom I spoke that you really cannot go much below 95 percent, because you really have this thin blue line that you have to stretch all the way across Europe, and it is impossible to do it.

And I remember asking the Secretary General and General Galvin and others the specific question: Was there prepared by the high-level group anywhere, has there been prepared a set of options papers for the heads of state of the NATO countries to be able to look at? In particular, for the President of the United States to be able to look at, that said, if the Soviets moved to *x* minus 10, we could then configure forces and still be defensively secure, moving to *x* minus 4.

If the Soviets moved to *x* minus 17, could we then move to *x* minus 6? If the Soviets moved to *x* minus—and so on.

And the answer I got was, "No." Nowhere that I am aware of—I have been asking everybody and I would be encouraged to be corrected—is there anyplace that we here, our Pentagon, or there, at NATO headquarters, has there been an assessment done suggesting what we could tolerate and still be defensive at various levels of Soviet reductions.

The answer I got was, the Soviets are not going to do that—whatever that was.

I have been operating under the assumption, Mr. MccGwire, that whatever force configuration we ultimately negotiate, one of the essential elements of that negotiation would be that the United States specifically and NATO generally would feel that we were secure in that we maintained a defensive capability that would prevent the Soviet Union from being able to have any advantage greater, and hopefully less than they now possess, relative to the forestructures as they face one another.

And so, I realize that is a long preamble, but my two questions are, (*a*) what makes you think, Mr. Dean, is the irreducible minimum required to be able to have a defensive line that we could feel secure in, and (*b*) is it not important that NATO, Mr. MccGwire, be able to end up in a position, and all along the process be secure that we are defensively in good shape?

Do you understand my question?

Mr. MccGwire. Yes, you are very clear.

I think there is a conceptual problem here. It is that just as in the early 1980's, why we ran into the problem, the internal argument about deterrence and why did NATO—was essentially that two different objectives that we had been pursuing since the 1950's finally became too difficult—the steppingstones were too far apart, and we had to decide.

One was the traditional doctrine that deterrence, that says that war will come because the Soviets are going to attack us, and if we do not deter them, there will be war.

The other point of view says the danger is war, and if there is a war, the Soviets will attack us. Now, you could cover both of those things up to a certain place, and then when you added on more from the deterrence side, you began, in other words, making war more likely.

Now, that was the kind of argument. You are coming into the same kind of thing—it is a way moving from a zero sum to an expanding sum way of thinking. And as we move through this process, I would agree with you, we have got to keep the defense going the whole time, but at some stage I would suggest that you are going to get your defense through things like structure, through

things like surveillance, you know, all the things that Jock Dean has talked about.

Senator BIDEN. Or the things that Mr. Gaffney is talking about.

Mr. MCCGWIRE. And you are going to have to move into the concept of a mutual security regime, and away from the concept of two antagonistic systems.

Senator BIDEN. But does that not require you to arrive at where Mr. Gaffney is, and that is that in order to ever be able to be secure under that circumstance, you would have to be convinced that the Soviet Union has structurally changed, not politically—in a political sense and an economic sense, as well as in a military sense.

Mr. MCCGWIRE. Why political and economic? I mean, as long as their military doctrine and their whole military approach has changed.

Senator BIDEN. Well, not that their military doctrine—I guess, again, I am——

Mr. GAFFNEY. May I respond to that?

Senator BIDEN. Pardon me?

Mr. GAFFNEY. May I respond to that—why it has to be across the board?

Senator BIDEN. Yes, you may, but let me try to figure this out to ask my own questions here, because I know that you all probably understand this. I am having a little trouble at this point.

The reason why you have to have, I would argue, political and structural change in the Soviet Union is that the military—if the military change within the Soviet Union is being accepted based upon not what the actual force configuration is, and having a sufficient defense to defend against it, but is being based on the conviction that they no longer have, the policy that they had prior to the reconfiguration—that is, they are now totally defensive—that that could change quickly, in terms of the minds of the Soviet planner.

And you still have to look at actual threat versus intention.

Mr. MCCGWIRE. But it is not threat. I mean, it was a contingency of world war that they covered, and that is what I say.

I mean, to reconstitute the contingency of world war would require us to do something domestically——

Senator BIDEN. Well, you are assuming that. Why could they not just do that?

Mr. MCCGWIRE. Sorry? Why what?

Senator BIDEN. Why could not the next Soviet leader come along and say, "OK, I no longer, no matter what the United States does, I have changed my mind about the contingency of world war. I think there can be a world war."

Mr. MCCGWIRE. The economic penalties would be so high that it would—the Soviets have never shouldered the defense burdens willingly. Whenever they have had a chance, they have cut.

Senator BIDEN. OK.

Mr. GAFFNEY. I could not disagree more. I must say, this has been an extraordinary exposition of, I think, the Soviet literature, but it seems so strikingly in contrast with the reality that I am not sure I understand how we make the leap of faith here.

I could not agree with you more, that we have got an adversary who is——

Senator BIDEN. You could not agree with the devil in me, the devil's advocate.

Mr. GAFFNEY. All right, I could not agree more——

Senator BIDEN. I do not want to ruin your reputation, here.

Mr. GAFFNEY [continuing]. With the part of you that was putting forward the proposition a moment ago, that the political system and the economic system it commands leave at its disposal, if unaltered, the ability to change course, as the Soviets have historically time and time again.

Senator BIDEN. Yes, but only if——

Mr. GAFFNEY. That is the part that I agree with.

Senator BIDEN. Only if you abandon the notion that there has to be a sufficiency of defense capability, a residual defense capability, that allows you——

Mr. GAFFNEY. That was what I was going to try to address, having made this point, that it seems to me that the Soviets have, unless they are transformed, the inherent capability to jeopardize our security, so therefore we have to worry about that issue.

I think a lot of work has been done on it, Senator, and in my experience, most of it was done by people outside of the Government—Rand was one of the places that did an awful lot of this gaming of the permutations of the force levels——

Senator BIDEN. I sat with Rand for a long time, and Rand told me they did not go that route.

Mr. GAFFNEY. Well, Jim Thompson is the guy to talk to, and if he has not done it——

Senator BIDEN. I did.

Mr. GAFFNEY. Well, if he told you he has not done it, then he has told you something different from what I have been told.

Senator BIDEN. Oh, no, no, he said they gamed it out, but I do not know anybody that has gone so far as to game it out, for example, at 50 percent.

Mr. GAFFNEY. Well, it may not be. But what I am saying to you is that I think what you will find is if you are not prepared to change the character of the defense that we currently have as NATO doctrine—namely, we are going to defend NATO, not part of NATO, not 300 miles or 300 kilometers back from the inter-German border to the West, but all of NATO—you do have that "thin blue-line" problem, and you do have the problem that you have got to have forces, not just surveillance and not just air interdiction capabilities, but you have got to have forces that can hold the territory.

Senator BIDEN. You only have that thin blue-line problem, I would argue, as long as they have a big blue-line capability. If they do not have the capability—you can allow—the line can get thinner and thinner and thinner as the threat diminishes.

I would like to go to you, Ambassador, and then you obviously wanted to make an explanation somewhere along the line, Doctor.

But would you speak to, Mr. Dean, the notion of, and the realistic possibility of being able to negotiate ourselves into a position where we could be secure in moving to a reduction of forces on the magnitude that you mentioned is possible—up to 50 percent? Yes, I think that is the number.

Mr. DEAN. That is NATO's level, that is right.

Well, I think one looks at the situation that you would try to bring about through this kind of agreement. It would involve, as I mentioned, the effort to delay the effects of any political reversal—the military effects of any reversal.

You would have controls over mobilization, the number of reserve units, their strength, their armaments, their training.

If the agreement were violated, you would certainly have earlier warning than you could conceivably think of. You would also know far better than today the actual direction of attack and the access of attack—you would not have to tack your armored force all along the line, waiting for an attack where they may never be used.

You can start interdiction on enemy territory early, because your air force continues—this is usually left out of the force to space argument—continues an effective force, even if it is reduced.

You have a larger defensive force with combat engineers, infantry, and obstacles in front, which is the equal of the opponents, but he cannot bring his along with him for the attack.

The NATO force is in its number even available on the central front, equal when mobilized to the full mobilized size of the Soviet Army with all of its reserve components, and as that army comes through interdiction and attrition, it will be met with a fresh force which is, as I say, probably larger at that stage than it is, and the cutting back of the Soviet force means that even in a sudden surge toward Western Europe, it should very well be possible to have an American logistics and reinforcement lodgement on the continent which might not be possible under present conditions.

That means a long war with the reinforcement that the Soviet military planners have to think, take into consideration, right from the beginning. So, I would argue that is a more secure situation.

Senator BIDEN. Well, I—to the chagrin of Mr. Gaffney, I am sure—I agree with you.

Let me be the devil's advocate with you for just a moment. It seems to me that the only hole that I subscribe to, that I acknowledge, may be a hole in our position—your position, that I happen to agree with—is this: that assuming that we were able to negotiate such a magnitude of reductions with built-in safeguards, all of which you have mentioned, and some you probably have not—assume that to be the case—if there was a change in attitude for whatever reason, and I happen to also agree with three of the four of you that I think the Soviets have embarked on a path that is going to be awfully hard for any Soviet leader to turn around, but let us assume that they did.

Is not the hole in our argument that it is easier for a, even if it is no longer totalitarian, an authoritarian regime, to reconstitute its military structure at levels far above what it had negotiated than it would be for democracies within the same timeframe to conclude that there was an emerging threat and have the willpower and wherewithal financially to go ahead and match Soviet buildup, if it were to occur?

How do you respond to that argument?

Mr. DEAN. Well, first I would say with the degree of openness in Soviet society today, and contacts with the West, you are going to get immediate political warning of this event when it takes place—I think it would be a very obvious event, and complaints, if it is

building up, will be coming out of the system at a very high volume.

Then, I do not think it is going to be possible for a new regime to organize the whole of society into a compliant mass, and I refer also to the military there. It is not going to be an immediate process.

Then if you have, by agreement, controls over reserve units and training and so forth, they have to engage in a certain period of small unit training, large unit training, all of which violates previous understandings, and they have to build their force to an extent which gives them the feeling—a margin of confidence.

That seems to me to be the process that——

Senator BIDEN. And you think Western alliances would, Western nations would respond to that?

Mr. DEAN. Well, this is a process which first would take years. Second, it would give such strident warning first from the beginning of the political development through the repeated violation of these commitments, that I think Western countries would react, and I think we should not have in our minds, perhaps, the picture of the NATO council reaching unanimity in order to resist aggression if it should take place.

I think the if a few of the key countries agree that action should be taken, then it will be taken. So, sometimes we contend with a kind of Polish veto idea of how NATO operates, but I do not think it would in a crisis situation.

Senator BIDEN. I would add one point, and that is that I am positing these questions as if this all occurs in a vacuum.

The world is changing so drastically in Eastern Europe and Europe as a whole may be so significantly different as a consequence of some of these changes that are wrought that will impact on political and economic circumstances that it is hard to predict anything.

But anyway, Doctor, let me conclude with you.

Dr. STEINBRUNER. I just wanted to sort of give you some information about the state of understanding about the problem you were earlier posing, about what level of——

Senator BIDEN. Yes, it would be helpful to me.

Dr. STEINBRUNER [continuing]. Force.

The proposals are designed, of course, to put both sides in secure defensive configurations. What they are doing, what the Soviet proposal does, as does the NATO in their different ways, is to try to equalize the firepower on both sides, and it is firepower ratios that really drive the usual calculations that are done within the military establishments, assessing the prospects for a successful offense.

If you equalize the firepower ratios, you diminish most of the recognized possibility for successful offensive operations.

There then does arise a question as to in addition to equalizing, you are also reducing—at what point in the process of reduction do the lines get to be too thin? And there is no single answer to that question at the moment, and the reason is that it just extends modeling techniques, quite frankly.

Senator BIDEN. What modeling techniques?

Dr. STEINBRUNER. Existing modeling techniques really do not have any agreed method for taking this element of maneuver into account.

For that reason, part of what the Soviets are up to is not only a reduction but a restructuring of forces such that it—obviously it inherently limits the possible movement of those that remain.

Now, they are talking about it more than doing it, as yet, although they have just taken some tanks out of the residual forces in this initial reduction, and they are describing what they call a machinegun artillery division, which they say already exists, which they say is the future structure of many of their divisions.

That type of division and the force dispositions that they are talking about are designed to constrain the process of movement so as to allow secure defensive configurations with thinner lines, if you will, and the lines, of course, would be equal on both sides.

But your point, or your question, goes to a point where the professional community really does not have anything like an agreed answer. There have been no calculations in this area of reduction, taking into account the element of maneuver that would answer your question. It is open territory, basically.

Senator BIDEN. I appreciate it.

I know that the hospitality should dictate that I should let you go now, but this is such an opportunity, I want to ask you another question, and I promise that I will let you go then. And that is the question that was submitted by staff on the other side of the aisle, here.

On May 15, 1955, the Austrian State Treaty was signed, placing Austria in a neutral status. All foreign troops, including Soviet forces, as you all know, were out of Austria by October 25 of the same year.

Do any of the witnesses believe that it might be possible to use the Austrian model with respect to central Europe in today's context of change in the Soviet Union and Eastern Europe?

Does anybody want to try and tackle that one?

Yes?

Mr. GAFFNEY. Just on the Eastern side?

Senator BIDEN. Apparently, yes. Well, actually, all of Europe.

Mr. GAFFNEY. Well, I do not think—as long as there is a basic fear between the East and the West, and the alliances continue, which I believe they would, even under these reduced conditions, neither alliance is going to be pleased by the prospect of their respective German state leaving that alliance and making it nonworkable.

So, I would say in order to have the kind of change of this dimension, you would have to go far beyond what I and most other people are thinking of, even in terms of drastic reductions.

The idea that the Soviet Union in the present situation would in actuality permit or encourage East Germany to leave the Warsaw Treaty and bring about its demise in that way, and to give it the kind of complete freedom and domestic political economy and political system which would amount to a kind of Anschloss in the Federal Republic does not seem very practical at this point.

So, it seems to me that even in this new postreduction Europe, if it does come about, and I believe it will in one way or another—if

you are going to have the alliances continue, the stronger European Community, and probably an emerging CSCE apparatus which will be a kind of rudimentary Pan-European structure, not very powerful, probably.

Senator BIDEN. Mr. Gaffney.

Mr. GAFFNEY. Well, Senator, if I could use that as sort of a point of departure for just a summary of what I am concerned about—I think absent the fundamental structural change in the Soviet Union, it would certainly not be in our interest—and I do not think in the interests of any of the prospective candidates for this arrangement—to demilitarize.

What worries me is that we do see policies being adopted here and elsewhere, particularly in Western Europe, suggesting that what we are creating is a means whereby the Soviet Union can perpetuate the existing arrangements, the existing system, can get the "peredyshka," as they call it, the breathing space, that will permit not fundamental transformation, but a gathering of strength for whatever purposes they wish to put it under this leadership or another down the road.

In that regard, I would just call to your attention a couple of summary things. One, I think that the question of subsidies that you have made and Senator Bradley and others have made is absolutely central on this point. The extent to which we are subsidizing, through untied or Government-guaranteed loans and so on—this is going to cause part of the problem for us, down the road. The extent to which we are going to abandon the no-exceptions policy under which COCOM exercises real controls over the dual use technology that is made available to the Soviet Union—this is in the offing, and will probably happen at the NATO summit.

I think it is a dreadful mistake.

A further thought, which I think is of interest to members of this committee is that we are engaging in a preferential policy to the extent that we do these things, that is really directly inimical to the kinds of relations we are trying to have with our allies in this hemisphere.

Just today, I learned, for example, that on the very day that the Soviet wheat deal was announced—what is now being called the second Great Grain Robbery—Mexico came in with a proposal to get wheat from the United States, $1.5 billion, I am told, financed at market rates, through the Commodity Credit Corporation, and was turned down for budget reasons by Treasury and OMB.

These are the same people who acceded to the idea of giving the Soviets a $250 million subsidized deal.

So, finally, one of the things that is a wild card in all of this is do we understand what is going on in the Soviet Union, and I would just urge that you think hard about the need for competitive intelligence assessment of what is going on there, what the risks are and what the opportunities are for us. This could be done in two ways.

One is to have a Presidential foreign intelligence advisory board. It is defunct at the moment. That is a terrible mistake. We need its rigorous secondguessing.

And second, I think that George Bush, who reluctantly commissioned the first team B ought to be encouraged to create a new

team B that is in an institutionalized way looking at all of these questions, so that you are not reliant upon a sole source or a homogenized source of information, but are getting the best assessment of what are our risks and what are our opportunities vis-a-vis the Soviet Union in the days ahead.

Thank you, sir.

Mr. GAFFNEY. A short answer sir.

Austria, no. Finland, perhaps.

But this really does depend on this regime continuing. I mean, I think that the Gorbachev approach is a very important one for the future of Europe.

I do not think it is clear that the Soviet Union wants, in the long term, to be linked to the satellites. Of course, nor does the EEC. I mean, the EEC does not want to pick up any more basket cases.

Russia went into Europe—initially the justification was being drawn in by the war, but there was an economic justification, an ideological justification, and a military justification.

The economic justification, I do not think works anymore. The ideological justification they are talking themselves out of as hard as they can go, and I am arguing that in military terms, it is going to be an absolute burden, ultimately.

It would be much better for their own security if they drew in their own frontiers. So, we just do not know.

We have been told that somebody said to somebody in the year 2000, they would be out—there has been one of those statements.

I would think about the future of Europe, that it is really an imponderable. We do not know how it is going to evolve. Go back and think of it not in terms of since 1945, but go back to 1814, since when we have, in fact, been trying to solve the problem that rose from 92 ethnic groups that are stuffed into that part of the world.

And it is not clear whether or not we may be approaching some kind of resolution, and in fact, the last 40 years, when they were kept in their bottles and fermented a bit, and the Germans talked to the French and things like that—we may be moving into a new situation where we are going to have a different kind of Europe, not like a United States of America or an EEC, but a far more complicated one—in fact, a completely new political structure.

And that, I think, is the way to go, you know, with the mutual security regime being the first step, and then this sort of strange Europe which I postulate as a sort of second step, coming about 2030.

Dr. STEINBRUNER. I will just add a single sentence.

I think the future organization of Europe will revolve around economic relationships more than even the redesign of these traditional security relationships, and so I doubt if the neutralism solution is going to be very prominent.

Senator BIDEN. I would add, I think that is one of the things we are afraid of, and should not be.

At any rate, I truly appreciate you all giving me this much time, and I would like to thank the stenographer.

I think they must draw straws and hope that none of them get the Biden hearings.

I want to thank you very, very much, and hope that you will not be afraid to come back another time.

Thank you all, very much.

The hearing is adjourned.

[Whereupon, at 5:45 p.m., the subcommittee was adjourned, to reconvene at 10:11 a.m., June 1, 1989.]

HEARING #7
OVERVIEW

THURSDAY, JUNE 1, 1989

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met at 10:11 a.m., in room SD–419, Dirksen Senate Office Building, Hon. Claiborne Pell (chairman of the committee) presiding.

Present: Senators Pell, Biden, Robb, Helms, Kassebaum, Pressler, Humphrey, and Mack.

The CHAIRMAN. The Foreign Relations Committee will come to order, as today we convene the seventh in our series of hearings on the future of United States-Soviet Relations.

We began these hearings 2 months ago with testimony from Ambassador George Kennan. In subsequent hearings, the committee heard from a series of panels, focusing on different aspects of the Soviet Union and the superpower relationship. These sessions ranged across such subjects as the Gorbachev era in historical context, Soviet foreign policy, East-West economic relations, defense issues, including nuclear, and conventional arms control.

Today, in its seventh hearing, the committee will receive testimony from a former Ambassador to the United Nations, Dr. Jeane Kirkpatrick. As a parallel to the opening testimony of Ambassador Kennan, Ambassador Kirkpatrick has been asked to provide, from her perspective, an overview of the superpower relationship, as she sees it, in the era of Mikhail Gorbachev.

We look forward to your testimony.

Senator Helms.

Senator HELMS. Thank you, Mr. Chairman.

I join you in welcoming a lady whom I greatly admire. She knows that and everybody who knows me knows that.

As you have indicated, Mr. Chairman, the committee thus far has taken note of the fact that our relationship with the Soviet Union appears to have changed, but the question is whether the change in relationship is based on a fundamental change in the reality of Soviet aims and goals.

Dr. Kirkpatrick has a reputation for understanding Soviet aims and goals as few other scholars in our Nation today do. Throughout her years at the United Nations, she blazed a trail for the support of freedom throughout the world. She did it in the teeth of a viciously anti-American diplomatic community in New York City,

and in order to do this, she had a fundamental perception of what the Soviets were trying to do.

I will say to her that I will never forget that session at the Security Council that was called following the shooting down of KAL 007.

As I recall, Dr. Kirkpatrick, you played a tape and you showed a film that graphically presented the words on that tape. The tape ended with the Soviet pilot proclaiming proudly, "The target is destroyed," meaning 269 innocent people, including 2 little girls whom I had held on my lap at Anchorage, Alaska, just a few hours earlier, had died.

That tape told us more, I think, about the Soviet attitude and intentions than anything else I have seen. At the end of your tenure at the United Nations, the U.N. took the United States seriously, something they had seldom done before.

So, Mr. Chairman, it takes rare courage in a diplomat to face down the hostility of ideologs and calmly present the facts, as Dr. Kirkpatrick repeatedly and constantly did.

But it takes even more courage in the academic world, from which Dr. Kirkpatrick has come. She has always understood the intellectual foundations of freedom, and some of her more difficult moments have been on U.S. university campuses, where she was prevented from speaking by students whose notions of free speech did not extend to those who believed in fighting to preserve that freedom.

Secretary Gorbachev is a man who obviously is highly skilled at manipulating the Soviet image, and he operates from a vision of the Soviet Union which few have seen, and even fewer have understood. Dr. Kirkpatrick is still revered in the diplomatic and policy community as one of those rare people—rare people of stature—as somebody to be reckoned with, even when her insights contradict the prevailing establishment.

So, I welcome you, Dr. Kirkpatrick, and look forward to hearing your views on the Secretary's vision for the Soviet Union and the world.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Ambassador Kirkpatrick, we are very glad and happy to hear from you.

STATEMENT OF HON. JEANE J. KIRKPATRICK, FORMER U.S. AMBASSADOR TO THE UNITED NATIONS, AND SENIOR FELLOW, AMERICAN ENTERPRISE INSTITUTE

Ms. KIRKPATRICK. Thank you very much, Senator Pell and Senator Helms.

Thank you for inviting me. I am pleased to be here.

I think the question of the day, a terribly important question, is whether the potential now exists for the transformation of the United States-Soviet relationship, a relationship that has dominated international relations since the Cold War got underway in the years following World War II.

Many people believe that the answer to this question, of whether it is now possible to transform United States-Soviet relations lies in internal changes in the Soviet Union. They assume that the inter-

nal structures and politics in the Soviet Union will, in fact, shape their policies. Specifically, they assume that a dictatorship is far more likely to produce aggressive, expansionist policies than a reformed, even semidemocratic/semiauthoritarian government.

This thesis, that the internal political structure of the Soviet Union will shape its foreign policies, is a view that has been held by many people through the years. Richard Pipes, for example, in his most recent book on the Soviet Union has argued, as he has in the past, that as long as the Soviet Union remained a totalitarian dictatorship, it was likely to pursue expansionist and aggressive policies.

I, myself, have believed that, while not all dictatorships pursue aggressive and expansionist policies, all those governments which pursue expansionist, aggressive policies are dictatorships. Democracies do not engage in aggressive, expansionist wars. They just do not.

Democracies only engage in war defensively, when they are forced to defend themselves. This is because people, given the possibility to express their views, preferences, and values, will not choose to go to war, to sacrifice themselves, their sons, their treasure, their lives, in aggressive wars.

So, many of us have believed that aggressive, expansionist policies are likely to persist, or remain a danger, as long as the internal political structures of the Soviet Union remain those of a totalitarian dictatorship.

Now, it follows from that that internal reforms might very well, if they were sweeping enough, produce changes in Soviet foreign policy.

This is the most serious ground, for believing that there may be significant changes in Soviet foreign policy possible today which were not possible in the past; one ground for believing that the United States-Soviet relationship might be transformed.

There is another ground, which has been offered by Soviet Foreign Minister Shevardnadze for believing that it may now be possible to transform the United States-Soviet relationship. That is Shevardnadze's assertion that the purpose of foreign policy in the Soviet Union today is to foster conditions which will permit and encourage reforms in internal affairs.

Now, if the purpose of Soviet foreign policy is to promote, foster, and reinforce reforms in internal affairs, then we would expect to see a transformed Soviet foreign policy.

Those are theoretical questions, both of them. Their answers finally will be settled by the evidence. They are also empirical questions. We will have to wait until we have the evidence to be certain whether or not Soviet foreign policy changes in ways that are designed to foster internal reforms, or whether internal reforms result in significant changes in Soviet foreign policy.

I would like to say that I believe that there are significant internal changes underway in the Soviet Union today. I have watched with enormous interest and fascination, even, the evolution of internal changes in the Soviet Union.

I believe that there are today challenges to very fundamental questions of Marxist dogma that are being made in the Soviet Union. Those challenges are being posed. Sometimes I think that

the challenges to Soviet Marxist dogma and doctrine are even more basic than Gorbachev and certain other leaders in the Soviet Union themselves fully articulate.

I think there have been, in some of the agricultural reforms, for example, very fundamental changes, challenges, mounted to the traditional Marxist doctrines of property. It has been asserted that they must examine socialist conceptions of property. It has been asserted that socialist conceptions of property are producing alienation; that socialist conceptions of property are not leading to the results that Marx anticipated. It has been asserted that Marxist conceptions of property are producing stagnation, rather than the economic conditions necessary for development.

Many such assertions concerning property, the organization of property, the nationalization and socialization of property, have been made, and they are very fundamental.

There have been fundamental changes, I think, fundamental challenges to Marxist and Leninist conceptions of party and the role of party in society. I think these challenges to Leninist dogma are very fundamental.

I believe, for example, that when Mikhail Gorbachev accepts the persistence in the Soviet Communist Party of the disagreement and the organization of what Lenin called "factions" around those disagreements on policy, he is violating fundamental Leninist dogmas that have been in place since 1921, when Lenin enunciated them.

I think that in holding those interesting Soviet elections, Mikhail Gorbachev in fact violated a Leninist conception of party. We will recall that V.I. Lenin believed that it was the business of the Communist Party of the Soviet Union to serve as a vanguard and to lead the masses. It was not their obligation or even their appropriate obligation to listen to the masses. It was their business to guide the masses.

Lenin's whole political career was dedicated to the conception and the construction of a vanguard party, whose whole function was to lead the country, not to listen to the country.

When Lenin made the crucial decision to seize control of the Duma, the Soviet legislative assembly, which had been elected by popular elections, he decided, wrote, and said on that occasion that the public opinion should not be listened to; that public opinion was to be molded by the vanguard, not to be a guide to the vanguard.

Never did Lenin deviate from the view that the opinions of people were the consequence of false consciousness, shaped by the corrupt society in which they lived, and that those consciousnesses should be reshaped by the vanguard and not listened to by the vanguard. If the party is to lead, to mold, and not to listen, then there is no need for elections, and there is no need to respect elections. Those elections were not honest, democratic elections. They did not meet American standards of democratic elections, or European standards of democratic elections. They didn't even meet Latin American standards of democratic elections. But they were, by Soviet standards, extraordinarily important events. They provided the Soviet people their first opportunity in 70 years to express their views about any public issue. They indicated in the Soviet leadership an inclination to reexamine these entrenched Leninist

views concerning the appropriate relationship between public opinion and the party leadership.

I believe that the internal changes in the Soviet Union are significant; that manifestly they extend to the political sphere, as well as to the economic sphere. I believe that they have been pushed beyond where I thought they would be pushed already. I think glasnost is a very exciting development in the Soviet Union. It leads to some new questions, like "what is true"; just as perestroika and the conception of restructuring leads to new questions about the organization of the society and economy, like "what works."

These are not fundamentally Marxist-Leninist questions—what's true and what works?

I think Yegor Ligachev, Gorbachev's principal rival, accuses Gorbachev and his colleagues of deviating from fundamental Marxist principles and in challenging fundamental dogmas of socialism.

Now, I do not think that this process of internal reform, which I think is underway in the Soviet Union, and is important, and is exciting, necessarily tells us whether or not the United States-Soviet relationship will be transformed in the foreseeable future. It does not tell us whether the Cold War has ended. Nor does Shevardnadze's assertion that they would like to make Soviet policy a tool for advancing the process of internal reform tell us whether it will be possible to transform the United States-Soviet relationship.

What does tell us whether it will be possible to transform the United States-Soviet relationship?

I believe the answer to this is Soviet actions. Soviet policies will tell us whether it is possible to transform our relationship.

I believe that Soviet behavior, particularly in two realms, will be definitive. The first, of course, is Soviet behavior in the realm of military development, deployment; the level of military expenditures; the quantity and quality of research and development and deployment of weapons. What is the nature of those weapons? Where are they deployed? At whom are they aimed? Will the Sino-Soviet border be demilitarized, or will most of the armaments on the Sino-Soviet border be withdrawn? Will the Soviet Union agree to reductions in forces and in weapons in Western Europe, which will truly, finally, free Western Europe from the threat of potential military "Finlandization," or will they not?

Will the Soviet Union actually cease its violations of the ABM Treaty, in which I believe it engages, and its own construction and deployment of radars in places like Krasnoyarsk?

Will it invest less and deceive less in its effort to develop and deploy powerful weapons against the United States?

These are very concrete kinds of questions whose answers we do not yet have fully in hand.

The second category of Soviet policies which I think will tell us whether or not it is possible to transform our relationship concerns what have come to be called "regional conflicts." I'm not sure that's very useful vocabulary, but everybody uses the term, so I will, too.

What is called "regional conflicts" of course refers to such places as Ethiopia, Afghanistan, Cambodia, Nicaragua, El Salvador, Angola, Mozambique, and other areas in other parts of the world

where force has been used to establish and sustain a Marxist-Leninist government integrated into what the Soviets call the "socialist world system," where Soviet support and Soviet bloc support has been crucial to the establishment and consolidation of a Communist government, or where Soviet and Soviet bloc force are used in the effort to establish a Communist government, which would then be integrated into the Soviet world system.

Will the Soviet Union change its policies? Will it, for example, cease the steady supply of weapons to the Government of Nicaragua, to which we know it has provided something like $5 billion in largely military assistance over the last decade, and $1 billion last year? Will it cease or significantly diminish, even, its military assistance to Cuba, which aid levels, as I understand it, still stand at about $12 million a day, or $5 billion a year?

Will the Soviet Union cease or diminish significantly its military support for such governments as the MPLA in Angola, so that it can continue its war against the people of Angola, and refuse internal reconciliation with the forces of Jonas Savimbi?

Will the Soviet Union diminish or end its support for the Government of Afghanistan, which could encourage a process of internal reconciliation and move to elections in that country?

Will the Soviet Union actually end its support for the Government of Vietnam and its occupation, or effective occupation, of Cambodia?

There are some optimistic indications with regard to Soviet policy in regional conflicts, and there are also some disturbing negative evidences in those conflicts.

I do not believe that we know yet whether the Soviet Union is willing or ready to abandon the effort to consolidate and expand its empire by the use of force. I do not believe we know yet the answer to whether the Soviet Union is willing to repeal the Brezhnev doctrine and permit self-determination to the peoples of Eastern Europe or any other Communist society today.

I think, when we consider the question "has the Cold War ended," it is very important to recall that the Cold War was inaugurated by the use of force by the Soviet Union to establish and consolidate Marxist governments in Eastern Europe, integrated into a then-developing, nascent Soviet socialist world system.

It was the use of force which created the Cold War, the use of force in the imposition of a Marxist government in Poland, the use of force in the imposition of a Marxist government in Hungary, the use of force in the conduct of the Czechoslovak coup or the effort to impose the Berlin blockade. The use of force was crucial.

The use of force by the Soviet Union produced the division of Europe. It produced the Truman doctrine to assist the societies of Greece and Turkey, to prevent their incorporation into the Soviet bloc. It produced the Marshall plan, it had produced NATO and the security shield behind which the democratic countries of Western Europe could consolidate their own recovery.

The Cold War produced the Warsaw Pact countries and NATO. It is only reasonable that as people think about the possibility of the ending of the Cold War that this occur simultaneously with the discussion of reductions in forces in Europe, where the division has symbolized the Cold War and the Soviet threat.

Will the Soviet Union change its policies? Will it permit the countries of Eastern Europe to decide for themselves what kind of society they want and what kind of government they desire, and what kind of alliance system they desire?

I think we don't know the answer to that. Quite frankly, the developments in Hungary have moved more rapidly than I would have anticipated. I think it is significant that the Government of Hungary is engaged in a really dramatic kind of transformation of its own constitution and has solemnly endorsed multipartyism in Hungary.

I believe it is significant that the Government of Hungary has applied for and received formal observer status in the European Parliament at Strasbourg. I believe it is true that Hungary will probably seek full membership in the European Common Market before 2 years have passed. It is generally expected that Austria will seek formal membership this year and that Hungary will not be far behind.

I believe it is true that the Government of the Soviet Union seeks to create an impression in Hungary and outside Hungary that Hungarian affiliation with the European Community would be acceptable to the Soviet Union.

Whether or not it would finally be acceptable remains to be seen. Whether or not the Government of Hungary would have the freedom to decide on its relationship with the Warsaw Pact as well, we do not know. Whether or not the Government of Poland would have the right to choose its own road not only to socialism but away from socialism, we do not yet know.

Mikhail Gorbachev has said repeatedly that every socialist country should have the right to choose its own path to socialism. He has had less to say about what would happen if they chose not to go toward socialism at all.

He has said repeatedly that it is unthinkable that Soviet force would be used against a fellow socialist country. But he has not yet made entirely clear that force is unthinkable against a country which is seeking to transform its socialist system.

Those are hypothetical questions, but they are also extremely practical questions.

In the answer to those questions I think we find the answer to the question: Has the Cold War ended, is it about to end?

There is an article of Michael Mandelbaum in the spring quarterly issue of Foreign Affairs on the question of ending the Cold War. In that article, Michael Mandelbaum asserts, and I quote:

> The threat of Soviet aggression against Western Europe is credible because it has already taken place and continues in the present against Eastern Europe. Ending the Cold War requires ending the Soviet threat to Western Europe, which requires ending Soviet subjugation of Eastern Europe, which means allowing the people of that part of the world to decide freely how to govern themselves. The principal requirement for the end of the Cold War, in short, is self-determination for Eastern Europe.

I think that is entirely correct. Self-determination for Eastern Europe means renouncing the use of force in relationships with Eastern Europe and permitting the people of Eastern Europe finally to decide what kind of society and what kind of government they will have.

I do not believe there will be an affirmative answer to the question of has the Cold War ended as long as the people of Eastern Europe are governed in the shadow of the Soviet Army. I do not think that the end of the Warsaw Pact is a necessary prerequisite to the end of the Cold War. But I believe that the Warsaw Pact and NATO would alike be unnecessary were there, in fact as well as in theory, an end to the use of force by the Soviet Union to impose its own preferred social system on its own people and on neighboring people.

So, self-determination is the issue. Self-determination is the issue for the people of the Baltic States. Self-determination is the issue for the people of Eastern Europe.

When the Soviet Union grants self-determination, true, honest self-determination, democratic self-determination, to the people of Eastern Europe and the Baltic States, I think we will know that the Cold War has ended and that the United States-Soviet relationship has been transformed.

Thank you, Senators.

The CHAIRMAN. Thank you very much, indeed, Ambassador Kirkpatrick, for your statement.

There are a couple of points that I would like to enlarge on—and we will proceed with the 10-minute rule.

My understanding of perestroika is what Gorbachev sought to do was to leapfrog over the Stalin days and return to Lenin and the NEP, the new economic policy, of that time.

That seemed to me to make a good deal of sense. But from your testimony, I understood you to say that, instead of going back to Leninist doctrine and permitting a certain amount of the free market economy to come into it, he was violating the Leninist doctrine. I jotted down those words.

In what way did you see him violating Leninist doctrine?

Ms. KIRKPATRICK. Senator Pell, it is true that Gorbachev has referred to Lenin as his mentor repeatedly. And in every room in the Soviet Union of an official nature, there is a likeness of Lenin. When I visited there 2 years ago, we found likenesses of Lenin in oil and in photographs, and there was one room in which there was a parquet Lenin on the wall. Lenin is never spoken of except with reverence, even, by Mikhail Gorbachev, and his texts are regularly cited.

Gorbachev, himself, has repeatedly referred to the NEP period as a kind of model for his own economic reforms, particularly in agriculture and industry.

I believe, however, that an examination of some of the policies of Gorbachev, with regard to the party, with regard to leasing, with regard to public opinion go beyond the NEP period and do challenge some fundamental Leninist conceptions, especially concerning property and party.

The notion of "party" was at the very heart of Leninism, and the relationship of the party to the public is at the heart of Leninism.

I believe that Gorbachev, has moved beyond that toward a somewhat more democratic conception than Lenin ever accepted.

You know, there is a kind of refurbishing of the reputation of social democracy in the Soviet Union and Eastern Europe today. Social Democrats and social democracy having, for years, been the

principal targets of Leninism, are today being spoken of very respectfully.

I do think that in some of the current Gorbachev initiatives one sees elements of the Social Democrats' position in some of the reforms, in the forefront of the reforms.

I do not think that is being stated by Gorbachev himself, and I do not expect that it will be.

The CHAIRMAN. I wonder if you would agree with my own thought, which is generated from having lived behind the Curtain and having read a certain amount on it since, that communism, as a system, just does not work. You realize that when you live under the system it goes against human nature. You can see even that on this side of the Curtain.

I remember living in a city in Italy that had a Communist mayor. But they had to have regular, normal city politics to make it work. The same thing is so for Eastern Europe, where a man's desire to worship freely, travel freely, work freely, pile up a little money for his children, those go completely counter to communism.

Our job, as leaders, is to try to keep the peace while this system works itself out, and what we see before us is the final start—not the finish—but the final start of the erosion of the system.

Would you concur in my own view that in a period of years, probably after our own lifetimes, but in 30, 40, or 50 years, there will be no such thing as a Marxist or Leninist government?

Ms. KIRKPATRICK. Senator Pell, I certainly concur that there is a crisis in communism that is produced, above all, by the failure of the system. The fact is that the cumulative impact of the economic, social, and political failure of the system is being felt today in virtually every Communist country. Global communication, satellite technology, and continuous travel have brought to the attention of the Soviet leadership and to Communist leadership, generally, the fact of the poor performance of their system, as compared to non-Communist systems.

When one compares North Korea and South Korea, Taiwan and the People's Republic, Hong Kong and Singapore and the People's Republic, whether one compares Austria and Czechoslovakia or East Germany and West Germany, wherever there is a comparison of a Communist and non-Communist system, one can observe the crisis of communism, the failure of communism.

Mikhail Gorbachev is a man who likes to travel and has a very acute sense of that failure.

I found one of the most interesting and arresting facts about Gorbachev's biography to be this. I noticed this when he was first elevated. When he was a middle level apparatchiki, he and Raisa had gone on a summer vacation with another Soviet couple, driving through France and Italy.

Now, it is a very unusual vacation for a rising Soviet apparatchiki, and it indicated a kind of curiosity about the world, which I thought was a positive thing. We now know that he loves to travel, and finds it easier and more pleasant, probably, to meet foreign leaders than to stay at home and face his economic problems.

We can all have a certain sympathy with that, I think.

But I think that Communist leaders, with him in the lead, are facing not only the stagnating effects of Marxist economics, but

also the stagnating effects of Marxist politics, and that they are seeking to reform themselves. If they have enough time and if we have enough time, I think we will see the end of Marxist-Leninist states, in Europe at least.

I think we will see an end to the totalitarian model of Marxist-Leninist states in another 30 years, nothing intervening, and maybe even a lot more rapidly than that—maybe.

The CHAIRMAN. The important thing is for we, who in leadership positions, to avoid blowing ourselves up in that period.

Ms. KIRKPATRICK. Obviously we want to avoid nuclear war, or a war of any kind. Of course, nuclear war was not the principal threat to Western Europe initially. It was conventional forces. It was the Soviet predominance of conventional force that was the original, great threat to Western Europe, and all of our alliance systems are a monument to our recognition of the threat that conventional forces constitute to Western Europe.

So, I believe that it is desirable to maintain peace. It is desirable, obviously, to maintain the freedom and independence of democratic peoples, and to hope that the Soviet people and all the people who live under Soviet auspices, as under any other kind of dictatorship, will have the opportunity to enjoy self-determination and self-government.

The CHAIRMAN. Thank you. Thank you very much, indeed.

I turn now to the ranking minority member, Senator Helms.

Senator HELMS. Thank you, Mr. Chairman.

Dr. Kirkpatrick, if nothing else, we have the most enormous public relations battle that the world has ever seen. They are fighting it with printer's ink, headlines, and television broadcasts.

Did you notice the other day that the Soviet Foreign Minister, Mr. Shevardnadze, went to Italy and said that the Soviet Union is a European power? Then yesterday, I listened carefully to President Bush and what did he say, speaking live from Europe? "America is a European power."

Now, are both of them right or are both of them wrong?

Ms. KIRKPATRICK. Actually, I don't think America is a European power. I thought about this when I read President Bush's speech. I think we are an American power, frankly.

I think we have very important European roots, and I glory in our Anglo-Saxon political and judicial heritage. I glory in our diverse European population, and also in our non-European elements as well.

I think we are not a European power. We are an American power. I think that the Soviet Union is related to the rest of Europe ambiguously, and that is just a historical fact. You can define almost anything in almost any way.

Gorbachev, for some purposes, desires to present his country as a European power when he wants to speak of a common European heritage and a common European family, and a Europe from the Atlantic to the Urals—when he wants to speak of a Europe with the Soviet Union and without the United States.

But he wants to describe the Soviet Union as an Asian power when he is in China, and as a Pacific power when he is talking about the Soviet fleet in the North Pacific.

Well, we can understand that because we also describe ourselves as a Pacific power, as well as an Atlantic power.

I think what is important is that the Soviet Union has not only not been a part of democratic Europe for decades, but it has constituted a threat to democratic Europe. What defines the civilization of Western Europe is what we share with them, and what, unfortunately, the Soviet Union has not shared with them—that is, democratic, individualistic values and democratic institutions. So, it is a ploy, as he says it these days, with an element of truth. I think it is an exaggeration as we say it, with an element of truth.

Senator HELMS. Forgive my skepticism, but I don't believe Mr. Gorbachev would have gotten out of that limousine on Connecticut Avenue if he weren't just eager to get some money. That is the problem in the Soviet Union. As you said, the system has failed.

Ms. KIRKPATRICK. Right, the system is a failure.

Senator HELMS. They are looking, right now, for big loans from Western banks, from Western countries, at low interest, that no American could get.

I notice that you did not mention the Middle East, and I think maybe we ought to have for the record your feelings about that.

To what extent, Dr. Kirkpatrick, are the long-term goals of the Soviet Union in the Middle East to weaken Israel, promote radical movements, and threaten America's access to oil supplies of the region? How does that plan in all of this?

Ms. KIRKPATRICK. Senator Helms, I think that, so far, there is not much evidence of the new thinking having penetrated very far into Soviet foreign policy goals.

I believe, for example, that it may not be true that the extension of Soviet influence in Western Europe is Gorbachev's principal goal. The Europeans think it is, generally.

It may be that the extension of Soviet influence in the Middle East is Gorbachev's principal goal right now, or the extension of Soviet influence in Asia is Gorbachev's principal goal. He has worked very hard on all of these.

It was pointed out recently in my presence that, when he talks about removing tanks to the other side of the Urals, what is on the other side of the Urals? It is Iran, Turkey. So, it becomes very important to provide for the destruction of any weapons that are removed, and not simply for their removal from West to East.

I think that Gorbachev has indicated a very large interest in the expansion of Soviet influence in the Middle East. He has done this in several different ways. One is by his diplomatic offensive and pushing his own conception of an international conference to solve the so-called Arab-Israeli problem. His conception of an international conference is not that of any United States Government, if I may say. United States Presidents have made very clear that we would not support their version of an international conference because their version of an international conference would simply destroy the independence of the state of Israel.

The Soviet Union has never recognized and established regular diplomatic relations with Israel. It has sought to extend and intensify its relationships with Israel's most bitter enemies; namely, Libya, Syria, Iraq, and Iran. It has worked hard to reestablish close

relations with Iran in recent years, and provided a number of important economic incentives to Iran to tighten their relationships.

As you know, the very same day that the foreign ministers of the European Community were deciding to withdraw their ambassadors from Iran after the Ayatollah's threats to the life of Salman Rushdie, the Soviet Foreign Minister, Shevardnadze, was meeting all day with the Ayatollah and his officials, trying to solidify Soviet-Iranian relationships.

He has provided the most advanced weapons and planes to Syria and to Libya, and that is a very big disappointment to us.

So, we must take Soviet interest in establishing through military force a larger role in the Middle East very seriously, and we must take very seriously the hostility of that goal to the state of Israel.

You will remember that the Soviet Union sponsored the "Zionism Is Racism" resolution in the United Nations and supported it as recently as the last women's conference in Nairobi.

They have talked about improving their relationship with Israel. But, when the chips were down, what they did was upgrade the PLO office to the status of embassy in Moscow, and they have not established diplomatic relations with Israel.

Senator HELMS. The Soviet Union has always been very clever about using surrogates, and that is what they are doing in the Middle East. I don't know of anything they have done except a little PR with respect to Israel. I don't think Mr. Shamir is fooled by all of that. I hope not.

Do you have in mind any actions that the United States ought to take to impede the Soviet goals in the Middle East? Is there anything we should do?

Ms. KIRKPATRICK. Senator Helms, I think it is very important for the United States to insist to the Soviets that, if they desire to be treated like a normal power, then they need to behave like a normal power. If they want to contribute to peace in the Middle East, for example, and be included in negotiations of any kind, then they need to stop behaving like a power that is committed to war. They need to cooperate in finding solutions to such things as the spread of chemical weapons in the Middle East, and the spread of missile technology and missiles in the Middle East. Especially they need to stop support for hostile policies toward Israel, like those embodied in the "Zionism Is Racism" resolution.

I do not think that we can treat seriously any Soviet proposal that would give them a larger role in the peace process in the Middle East unless or until they have demonstrated by their actions a genuine desire to promote peace and concern for the security of all the states in the region.

Senator HELMS. Dr. Kirkpatrick, you have said about all that anybody can say. The proof of the pudding is going to be in the eating.

Ms. KIRKPATRICK. Right.

Senator HELMS. I am asked that question all the time. I don't have any crystal ball. I certainly have no unusual wisdom about it. But I think we had better play it carefully and watch closely. For example, I would be very interested if, as, and when the Soviet Union stops cheating on the INF Treaty which we just passed last year.

Well, I see that there is a vote on, and we will work that out. Senator Pell will be back shortly.

Senator BIDEN [presiding]. There is a vote on. But with your permission, Madam Ambassador, I will begin my questioning, if that is OK. Maybe we can keep some continuity, and maybe someone will be back by the time we finish.

Were you surprised by the events of the last year?

I shouldn't ask "were you." How surprised were you? I know that I was surprised during the last year and a half, and I believe I know and understand your well-articulated views on a number of subjects. How surprised were you by the events of the last year?

Ms. KIRKPATRICK. Senator Biden, I have been quite surprised. I have been surprised again and again by some of the reforms which have been undertaken in the Soviet Union.

The first reform which really caught my attention strongly was the effort to fill in the blanks of history and the campaign for what they call the "rectification" of error. It's really a correction of lies on the official record of Soviet history. This began with the Commission on the Rehabilitation of Bucharen, but it has continued to a discussion today of the Nazi-Soviet Pact, for example, and to the murders in the Katyn Forest. I think that is terribly significant.

I believe the level to which the expression of nationalist and ethnic identifications is today permitted, even in official bodies in the Baltic states, for example, is very significant. I think the level of "freer" expression is surprising. It is not "free expression," but there is much freer expression in the Soviet press. Sakharov said to me 2 years ago that articles were regularly published in Izvestia and Pravda which would have landed their authors in the gulag 6 months before.

I have been surprised and pleased at the progressive release of dissidents. I am pleased this year certainly at the increase in emigration, more liberal emigration policies.

The Soviet Union has not become a democracy. I was very pleased and surprised by the extent of freedom and discussion permitted in the course of the Soviet elections, and the extent of freedom and dissent that is being permitted today in the discussions in the new Soviet Congress.

All of those things surprise me, frankly, and delight me, I may add.

Senator BIDEN. I misread the clock. Apparently there are only 5½ minutes left to vote. And I misled my colleague from Virginia, I guess, too, because I thought, at least, that it was only the beginning of the vote.

I must leave, but when I come back, I'm going to ask you about three things in the remaining 5 or 8 minutes, whatever time I have left.

One is did Secretary Baker's speech reflect a change in policy on the Middle East over the last 8 years, in your opinion?

Two, I want to ask you—and I agree fully with you—that the Cold War started over in Central and Eastern Europe. It will end, or not end, depending on what happens in Central and Eastern Europe. What should/could we do to enhance the prospects of additional freedoms being generated?

The third thing that I would like to ask you is a dangerous thing for one politician to ask another. It is do you have any predictions? You spoke in your speech, in your opening statement, about Eastern Europe. But I would like to ask you for your predictions about what may or may not happen in Cuba, in Nicaragua, and in other places where we have had Third World conflicts that we have been engaged in or that the Soviets have?

[The information referred to was not available at the time of printing.]

Senator BIDEN. I am told there are 4 minutes left. I will be back, and that probably won't be able to be done in 6 minutes, either. But I thank you for your indulgence.

Since I am the only one here, we will recess until the next Senator gets back.

[A brief recess was taken.]

Senator HELMS. Mr. Chairman, we might ask staff to make a quick check to see if any Senators are going to be able to return.

The CHAIRMAN [presiding]. Yes. But because of the hour, we ought to bear in mind that the funeral of our former colleague is coming up in a little while.

Senator HELMS. Exactly.

Ms. KIRKPATRICK. Yes, I know.

Senator HELMS. Let me explain something.

I have been told that I spoke so softly this morning, Madam Ambassador, that it was difficult for you to hear. I have had just a couple of things added to my ears, and I listen to myself and I now talk more softly than perhaps I should.

The CHAIRMAN. I understand.

Senator HELMS. Let me just say this, Mr. Chairman.

As I indicated earlier, there is nobody I have met since I came to Washington in January 1973, who has impressed me more or whom I admire more than Ambassador Kirkpatrick.

I hope I live long enough to see you sworn in as Secretary of State. You will be a good one. I have advocated that for a long time, and I hope I am now speaking loud enough for you to understand what I am saying.

Ms. KIRKPATRICK. Thank you, Senator.

Senator HELMS. I will just allude once more to my skepticism. I hope everything works out. I think that is what you were saying this morning.

But I also hope we keep our powder dry because I am worried about the violations of INF. I am concerned about what I perceive—perhaps I am wrong—but about what I perceive to be a man driven by absolute necessity. He has got to get some money from somewhere, and the Western banks and a lot of Western countries have been falling all over themselves for years to make low-interest, or virtually no-interest loans to the Soviet Union, which have never been paid back.

This is the kind of thing that worries me. I do not want to be a part of any euphoria about Mr. Gorbachev.

I acknowledge that he is a personable man. He is probably the best PR man of this generation. But I am still skeptical and that is based on years of our country and other countries having been duped for sad consequences.

Now I cannot forget the Ukraine. I cannot forget the other things.

But I think you are entirely right in what I perceive to be your message to the committee this morning, that we should wait and see if we have some concrete actions to back up all of the PR effort that is going on.

But I thank you for coming here this morning. As always, I was very much impressed with your testimony. I thank you very much, and it is good to see you again.

Ms. KIRKPATRICK. Thank you very much, Senator.

The CHAIRMAN. Should we leave it open for a while?

Senator HELMS. Well, I have no indication that other Senators are going to be able to return on this side, Mr. Chairman.

The CHAIRMAN. I don't, either.

We thank you very much, Dr. Kirkpatrick, for being with us. We found your testimony stimulating and interesting, as you always are.

We wish you well.

The committee is adjourned.

Ms. KIRKPATRICK. Thank you, Mr. Chairman.

[Whereupon, at 11:35 a.m., the committee adjourned, to reconvene at 2:04 p.m., June 20, 1989.]

HEARING #8
A REPORT ON THE PRESIDENT'S TRIP TO EUROPE

TUESDAY, JUNE 20, 1989

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D.C.

The committee met at 2:04 p.m., in room SD-419, Dirksen Senate Office Building, Hon. Claiborne Pell (chairman of the committee) presiding.

Present: Senators Pell, Biden, Sarbanes, Cranston, Kerry, Simon, Sanford, Robb, Helms, Lugar, Kassebaum, Pressler, Murkowski, McConnell, Humphrey, and Mack.

The CHAIRMAN. The committee will come to order.

Today, Secretary Baker will present testimony as part of our hearings examining United States-Soviet relations.

He will also report on the President's trip to Europe, during which a new U.S. proposal on conventional force reductions was presented to our NATO allies.

Since the Secretary can only be with us until about 3:30, my opening statement will be brief. I would, however, like to point out that a new breeze is blowing in Moscow, and, as sailors, I think we would like to advise that it is important to perceive and catch that favorable breeze if we are serious about reaching a destination in the best possible time with the least wear and tear on the crew, which is all of us in America.

Senator Helms, the floor is yours.

Senator HELMS. Thank you, Mr. Chairman.

Mr. Secretary, before we get started and before I begin my opening statement, there is a young man in the audience who I would like for you to see now and maybe talk with briefly later. He is a brave young man. His name is Fang Kerr. His father is the renowned Chinese scientist, Fang Lizhi. His mother and his brother are guests of our Embassy right now in Beijing.

Fang Kerr is doing everything he can to focus attention on the threat to his parents' lives and those of other prodemocracy demonstrators in Communist China.

I would like for Mr. Fang Kerr to stand up. I believe he is in about the sixth row.

[Applause.]

Senator HELMS. Needless to say, I hope that this Government does everything to preserve the lives and health of your parents.

Opening Statement of Senator Helms

Senator Helms. Now then, Mr. Chairman, it is always a pleasure to welcome the Secretary of State to this committee. I can think of no Secretary, certainly within recent memory, who has made himself more readily available to Members of Congress or who has been more willing to come up here to the Hill to discuss administration policy.

He takes telephone calls, and I asked him a question down at the White House this morning. He gave me the answer just before we walked in here.

So, it is entirely fitting that the Secretary come here this afternoon to recap the extended series of hearings which this committee has been holding on our relations with the Soviet Union.

Having said that, I think it is also fair to say that the Soviet Union is a sort of moving target. In a number of spectacular ways, the world today is not the same world we had even 4 months ago. The Soviet Union is deeply involved in all of those changes, certainly in most of them.

Who would have predicted, for example, that the Beijing summit between Deng Xiaoping and Gorbachev would conclude with the crushing of the democratic movement in Communist China?

Who would have imagined that an election in Poland would permit Solidarity to become a part of the Communist government in Warsaw, but only on the condition that Solidarity accept a Communist economic and social system financed by the West?

Who could have foreseen the movements of the people in the Baltic states, in Georgia, and in Uzbekistan, and the brutal methods which Mr. Gorbachev used to put them down?

Who would have believed that the Soviets, already massively violating the INF Treaty, would dare to intimidate West Germany by publicly threatening to abandon the INF Treaty altogether?

Who would have expected the Soviets, after agreeing to dismantle SS–20 intermediate-range missiles under the INF Treaty, would, in just 1 year's time, double or quadruple deployment of the SS–25, the variable range follow-on to the SS–20, capable of reaching both intermediate and intercontinental targets?

Finally, who would have thought that Mr. Gorbachev, even as he wooed the West by staging these pleasant little elections in the Supreme Soviet would, at the same time, tightly consolidate his own power, authority, and offices in the Central Committee, the only real decisionmaking center in the Soviet Union?

Mr. Secretary, these are issues that have come to a head in the past 4 months, and I am sure that some of us, if not all of us, will be seeking your views on these and other topics during your visit today.

I welcome you to the committee.

The Chairman. Secretary Baker.

STATEMENT OF HON. JAMES A. BAKER III, SECRETARY OF STATE

Secretary Baker. Thank you, Mr. Chairman, thank you, Senator Helms. It's a pleasure to be here this afternoon to report on East-West relations and the progress that we have made in our European security policy.

As you know, the President has called for the United States and the West to move beyond our policy of containment toward a new objective, and that new objective is overcoming the division of Europe by making Europe whole and free.

We are seeking to bring a new unity to Europe, a unity which is based on Western values.

The President has also outlined his strategy for moving toward this objective. He has pointed out that America must lead in managing change, the change that Senator Helms was just speaking about, by establishing new missions for the Alliance and new missions for the West.

The movement that we are seeing in Soviet politics presents a potential revolution, and it is a revolution, if I may say so, Mr. Chairman, that we hope very much will succeed. New thinking, really, I think is probably a rethinking of their failed ideology. But nobody knows, I suspect not even Mr. Gorbachev himself, what kind of Soviet Union ultimately will result from these changes.

At this time of transition, the West's values and interests have led us to engage the East and to engage it actively. It is our view that we should not simply sit idly by. We have moved decisively to broaden our dialog with the Soviet Union, seeking to contribute content to the slogans of Soviet new thinking.

For our part, the Bush administration has been engaging the Soviets across the full range of our concerns. As always, Mr. Chairman, we begin with human rights.

During my ministerial talks in Moscow in May, I took up individual human rights cases with Foreign Minister Shevardnadze, telling him that we will not be satisfied until the several hundred remaining cases are resolved. I also indicated to him that we want the Soviets to go beyond simply the era of lists. We want to see them guarantee human rights by institutionalizing the changes that they are now making. We want to see, in short, an open Soviet political system and legal codes that will make the recent gains difficult to reverse.

I will discuss arms control and particularly our new conventional proposal later on in my statement. For the moment, though, Mr. Chairman, I would like to note that we have engaged the Soviets, as I mentioned at the leadership meeting at the White House this morning, on the full range of arms control issues. Besides the CFE talks, the strategic arms control talks began again yesterday in Geneva.

We have also been pressing the Soviets on missile and chemical weapons proliferation. While working to control the technological side of superpower competition through arms reductions and control, we have made it clear to Moscow that volatile regional conflicts must become a central focus of superpower cooperation because of the dangerous threats of escalation that they now represent.

In Moscow, General Secretary Gorbachev and Foreign Minister Shevardnadze listened carefully, I think, to presentations that I made on Nicaragua and on the Middle East peace process. They understand that we are giving diplomacy a chance in Central America and that our policy with respect to that region now enjoys bipartisan support.

They know the importance that we attach to the Sandinistas living up to their pledges in Esquipulas II. In the Middle East, they understand our support for elections in the territories, and they understand, too, why a premature international conference might only divert us from the changes we need to see taking place on the ground.

By taking positive actions in the area of regional conflicts, the Soviets can show us that the new thinking applies the world over.

In Central America and the Middle East, especially, but also in Southern Africa, the Horn of Africa, and Asia, it is time for the Soviets to prod their clients into doing some new thinking of their own.

As an outgrowth of the May ministerial discussions, we are now engaging in a series of expert talks with the Soviets on all these areas of regional concern. At the ministerial, we also had fruitful discussions on transnational and bilateral issues. The transnational problems were added to the agenda at our suggestion.

We have pointed out that the Alaskan oilspill, the Armenian earthquake, Chernobyl, global warming, all of these are problems that go beyond traditional geopolitical concerns of sovereignty and security to affect global well-being.

I would sum up this discussion of United States-Soviet relations this way, Mr. Chairman. No one can know the outcome of the changes taking place in Moscow and elsewhere in the Communist world. In the end, we do know that the success of reform will depend primarily upon the choices which are made in Moscow, in Beijing, or in East Berlin, not in Washington, in Brussels, or in Bonn.

And what we also know is that the East can progress only through both political and economic reform. To stand in the way of such necessary historic change, as we are seeing now to our outrage and sorrow in China, is to turn one's back to the future. This is why General Secretary Gorbachev's temporizing comments on these tragic events are disappointing.

At NATO's 40th anniversary summit, we made the next 40 years, not the last 40 years, our point of reference. As we took bold steps toward making war in Europe both unthinkable and impossible, we set our eyes on the objective of making Europe whole and free and making the world, Mr. Chairman, a much better place for everyone to live in.

In Brussels, the President took three significant actions to lead the Alliance in managing the change which the world faces.

First, this administration seized the opportunity to lock in and to accelerate a possible historical change in the balance of military forces in Europe.

Second, we reached agreement on NATO's comprehensive concept.

Third, we identified new missions for NATO.

Prior to the summit, the President concluded that the specific Warsaw Pact conventional forces proposals reflected tacit Eastern acceptance of the West's approach to CFE, and he concluded, thereby, that the time was ripe to give the negotiations a major push.

The four-part augmentation of our original proposal, which the President put forward, was universally welcomed by our allies.

Mr. Chairman, that proposal calls for:

First, locking in Eastern acceptance of the proposed Western limits on key elements of ground forces. This would mean fixing common ceilings on the number of tanks at 20,000; on armored troop carriers at 28,000; and on artillery pieces, between 16,500 and 24,000, depending on the resolution of certain definitional questions. The equipment which was reduced would have to be destroyed.

Second is expanding the West's original proposal to include limitations on all aircraft permanently based on land and on helicopters throughout the Atlantic to the Urals area at 15 percent below the current NATO total. Again, all reduced equipment would be destroyed.

Third is an agreement between the United States and the Soviet Union to each reduce their combat manpower stationed in Europe outside of national territory to parity, at 20 percent below current NATO levels, with the resulting ceiling on United States and Soviet ground forces stationed in Europe being approximately 275,000 troops. Withdrawn soldiers and airmen on both sides would be demobilized. This personnel ceiling would require the Soviets to withdraw approximately 325,000 military personnel from Eastern Europe, thereby reinforcing the objectives of the stationed forces ceiling in the original Western proposal.

Fourth is an agreement on acceleration of both the Eastern and Western timetables for reaching a CFE agreement along the lines I have just outlined and for implementing the required reductions. The Soviet proposal called for full implementation of an accord by 1997. The President at NATO set a goal of completing an agreement in 6 months to a year with completion of required reductions by 1992 or 1993.

Both sides would be obliged to destroy significant amounts of equipment. Most importantly, the Warsaw Pact's preponderance in critical components of military strength would be eliminated.

These efforts will not undercut NATO's defense modernization plans. They should be understood as part of a comprehensive approach to improving our security through both force modernization and arms reduction and control.

The Western governments are now in the process of preparing these augmentations of our original proposal. We hope to present them at the opening of the third round of negotiations in Vienna on September 7.

Both sides now agree, Mr. Chairman, in principle that there should be subceilings on forces on foreign soil in Europe, limits on any one nation's forces, and that there should be subzones.

There are some important differences in the way East and West apply these principles. The East has yet to advance its verification regime; but we hope and expect that it will be fairly forthcoming.

I do not want to get lost in the numbers here, Mr. Chairman. Let me simply say that our proposal has far-reaching political implications for bringing about the whole and free Europe that we seek.

We are seizing this opportunity to diminish the shadow Soviet military power casts throughout Europe. We seek to free Western Europe from the threat of aggression or political intimidation by superior Warsaw Pact forces.

Finally, we want to help free the political reform process in Eastern Europe from the heavy weight of an excessive Soviet military presence. While we tend to see the Soviet forces as a potential invasion force, to millions in the East, the Soviets remain an occupation force.

At the summit, the President also led the Alliance in taking a second important step toward the future, and that was Western agreement on the components of a comprehensive concept of arms control and disarmament. This achievement demonstrates NATO's ability to adapt to change, while maintaining our fundamental conviction that nuclear weapons can play a critical role in ensuring the effectiveness of our deterrent strategy.

In light of the existing imbalances in conventional forces, the Alliance agreed that any negotiations on short-range nuclear forces could begin only after the implementation of a CFE agreement is underway. Moreover, any negotiated SNF reductions will not be carried out until the CFE agreement is, in fact, implemented.

The summit communique underscores literally, in fact, that our objective in SNF negotiations would be to achieve partial reductions in these forces. The Alliance is committed for as long into the future as can be foreseen under the comprehensive concept to maintain an appropriate level of land, sea, and air-based nuclear systems, including specifically, Mr. Chairman, ground-based SNF missiles.

The third step forward by the President at the summit was his call for the Alliance to address new problems. He invited our Alliance partners to consider new missions for the Alliance. As we succeed in easing down the military confrontation in Europe, we must direct the Alliance toward new challenges.

First, the President spoke of our interest in furthering the decentralization of political, economic, and social authority in Eastern Europe. Even as we protect the West, we must reach out to the East to give substance to our commitment to overcome the division of Europe.

Second, the President also noted the newly recognized dangers to our security and well-being which are posed by threats to the environment. He proposed new efforts that the West might undertake to help the East rectify its massive pollution problems.

Third, the President focused attention on the need for cooperation in dealing with the array of security threats posed by regional conflicts and the proliferation of chemical and nuclear weapons and their delivery systems.

It is not necessary for NATO to develop highly visible, unified responses to all these new security threats, nor should our efforts be limited to cooperation among Western countries. These new threats menace allies, friends, and adversaries alike.

The success of the summit, and indeed of the Alliance itself, I think is testament to the enduring strength of the political, cultural, and economic ties that have united America with our European allies for 40 years. As the President has stressed, Mr. Chairman, America is and will remain a European power.

In Brussels, we and our Alliance partners set forth ambitious plans for the future. We made important headway on the security agenda, having successfully set guidelines for the development of

our nuclear and conventional force postures and arms control policies.

In addition, we focused attention on the need for the members of the Alliance and other Western states to address a much broader agenda that confronts us in Europe and in the world during the 1990's. But, most importantly, during this 40th anniversary of the signing of the North Atlantic Treaty and at a time of great change in East-West relations, we and our Alliance partners have forged, I think, Mr. Chairman, a new basis for unity.

I would be delighted to try to respond to your questions.

[The prepared statement of Secretary Baker follows:.]

PREPARED STATEMENT OF SECRETARY OF STATE JAMES A. BAKER III

It is a pleasure to appear before you this afternoon to report on East-West relations and the progress we have made in our European security policy.

NATO's commitment to protect our security and promote democratic values has been largely responsible for the positive developments we see in the international environment. At the NATO Summit, all Western leaders agreed that we are in a remarkable period of transition in East-West relations. A combination of Western resolve and economic problems within the Soviet Union seem to have convinced the Soviet leadership that it must re-think a wide range of domestic and foreign policies.

Now, it is the West's task to seize the opportunities that have been created by the new "correlation of forces"-- to borrow a phrase from Moscow. At this time of transition, we must work together to promote the West's democratic principles, enshrined in the North Atlantic Treaty and in the Helsinki Final Act.

The President has called for the United States and the West to move "Beyond Containment" toward a new objective: overcoming the division of Europe by making Europe whole and free. We are seeking to bring a new unity to Europe-- a unity based on Western values.

The President has also outlined his strategy for moving toward this objective. He has explained how America must lead in "managing change" by establishing new missions for the Alliance and the West.

U.S.-SOVIET DYNAMICS

We are living in an era of transition. The post-war system is being transformed, and a new environment is emerging. To establish the context of these changing times, it's helpful to begin with an assessment of how the Soviet Union is changing.

The movement we're seeing in Soviet politics presents a potential revolution-- a revolution we hope will succeed. "New thinking" is really a re-thinking of their failed ideology. But nobody knows-- not even Mr. Gorbachev-- what kind of Soviet Union ultimately will result from the changes underway.

At this time of transition, our values and our interests have led us to engage the East actively. We should not sit idly by. We've moved decisively to broaden our dialogue with the Soviet Union, seeking to contribute content to the slogans of Soviet "new thinking."

The Soviets have taken concrete and encouraging strides in a number of key areas. Emigration has increased dramatically. They have come forward with serious responses to our arms control proposals-- for example, on intermediate nuclear forces and conventional reductions.

The Soviets pulled out of Afghanistan as promised. They have agreed to work actively with us on transborder issues of global concern. But there is a long way to go before the promise of perestroika becomes reality, before the progress becomes institutionalized.

We'll have to be realistic and patient while we probe the Soviets to see how far cooperation can go. We're going to work hard to get results in every area. Some of the individual

steps may be small, but their cumulative weight could result in a markedly more constructive U.S.-Soviet relationship.

Results won't come easily; many of the critically important issues between us are not amenable to simple, facile solutions.

But the President and I are optimistic that progress will come if we have bipartisan support from Congress, if we and our allies stand by our convictions, if we remain engaged, and above all, if we stay united.

For our part, the Bush Administration has been engaging the Soviets across the full-range of our concerns. As always, we begin with human rights. During my ministerial talks in Moscow in May, I took up individual human rights cases with Foreign Minister Shevardnadze, telling him that we won't be satisfied until the several hundred remaining cases are resolved.

I also indicated to him that we want the Soviets to go beyond the "Era of Lists." We want to see them guarantee human rights by institutionalizing the changes they're making. We want to see an open Soviet political system and legal codes that will make the recent gains difficult to reverse.

On arms control, we are also moving forward. We have promising movement on conventional arms reductions. (I'll say more about the President's ambitious conventional proposal and the status of the CFE talks later.) The President has put forward an "Open Skies" proposal designed to build confidence through greater transparency. We are proceeding on a multilateral basis with the CSCE talks on Confidence and Security Building Measures in Vienna. We have just signed a bilateral agreement with the Soviets on avoiding military

activities that could lead to inadvertent conflict. Yesterday, strategic arms control negotiations resumed in Geneva.

And, we have also been stressing with the Soviets our interest in extending the arms control agenda to cover ballistic missile, chemical and nuclear weapons proliferation. These weapons are being acquired by irresponsible regimes in unstable regions and increase the danger of escalation.

While working to control the technological side of superpower competition through arms reductions and control, we have made it clear to Moscow that regional conflicts must become a central focus of superpower cooperation because of the dangerous threats of escalation they represent.

In Moscow, General Secretary Gorbachev and Foreign Minister Shevardnadze listened carefully to my presentations on Nicaragua and the Middle East peace process. They understand that we are giving diplomacy a chance in Central America and that our policy has bipartisan support. They know the importance we attach to the Sandinistas living up to their pledges in Esquipulas II. In the Middle East, they understand our support for elections in the territories, and they understand, too, why a premature international conference will only divert us from the changes we need to see taking place on the ground. We are now engaging in a series of experts talks with the Soviets on all the areas of regional concern.

By taking positive action to resolve regional conflicts, the Soviets can show us that their "new thinking" applies the world over. In Central America and the Middle East especially, but also in Southern Africa, the Horn of Africa and Asia, it is time for the Soviets to prod their clients into doing some new thinking of their own.

At the Ministerial, we also had fruitful discussions on transnational and bilateral issues. The transnational problems were added to the agenda at our suggestion. We have pointed out that the Alaskan oil spill, the Armenian earthquake, Chernobyl, global warming -- all these are problems that go beyond traditional geopolitical concerns of sovereignty and security to affect global well-being.

Foreign Minister Shevardnadze and I also signed an agreement combatting pollution in the Bering and Chukchi Seas-- a small step on what I hope will be a long road toward solving the international environmental problems which threaten all mankind.

On terrorism, we seek to establish points of contact within our governments and vehicles for information sharing about terrorist groups.

On bilateral subjects, we have established a full workplan of twenty-three items as diverse as ocean research, civil aviation, atomic energy and maritime boundaries.

I would sum up this brief overview of U.S.-Soviet relations this way: No one can know the outcome of the changes taking place in Moscow and elsewhere in the Communist world. In the end, we do know that the success of reform will depend primarily upon choices made in Moscow, Beijing or East Berlin, not Washington, Brussels, or Bonn. What we do know is that the East can progress only through both political and economic reform. To stand in the way of such necessary, historic change -- as we are seeing to our outrage and sorrow in China-- is to turn one's back to the future. And that is why General Secretary Gorbachev's temporizing comments on those tragic events are disappointing.

For our part, we strongly believe that reform in the Communist world-- whether in Asia or in Europe-- is very much in our interests.

That is why we're building on past efforts and moving forward on our broad agenda with the Soviets. We are exploring and establishing new vehicles that will foster systematic cooperation. And we'll be continuing our wide-ranging discussions during the ministerial meeting in September.

We're actively engaging Moscow with our eyes open and fixed on our longstanding goals and interests: protecting Western security and promoting the democratic values, goals and interests that we reaffirmed at the NATO Summit.

MOVING AHEAD: THE NATO SUMMIT

At NATO's fortieth anniversary summit, we made the next forty years, not the last forty, our point of reference. And as we took bold steps toward making war in Europe both unthinkable and impossible, we set our eyes on the objective of making Europe whole and free and the world a much better place for everyone to live in.

In Brussels, the President took three significant actions to lead the Alliance in managing the changing world we face. First, this Administration seized the opportunity to lock in and accelerate a possible historical change in the balance of military forces in Europe. Second, we reached agreement on NATO's Comprehensive Concept. Third, we identified new missions for NATO.

The President's Conventional Forces Proposal

Let me discuss the President's conventional forces proposal by giving the members a brief review of the negotiations to date.

In March of this year members of the North Atlantic Alliance and the Warsaw Pact began negotiations in Vienna on Conventional Armed Forces in Europe (CFE) that are designed to reduce the threats posed by Warsaw Pact superiority in key conventional military capabilities. At the opening of the CFE negotiations, we and our Western partners tabled detailed and comprehensive proposals designed to achieve security and stability in Europe at greatly reduced levels of conventional forces.

The Western proposal, which has become the basis for negotiations, calls for establishment of equal NATO-Warsaw Pact ceilings on key types of equipment that can be used to seize and hold territory. Beyond eliminating key Warsaw Pact military advantages, the Western approach to CFE seeks to reduce the Pact's capability to initiate surprise attacks and large-scale offensive actions, or to use military forces for political intimidation. We also want to reduce and constrain the overall size of Soviet forces, the extent of their deployment in Eastern Europe, and the relative speed with which they can be brought to bear in any conflict.

Finally, our approach includes four sub-zonal ceilings which would limit the concentration of forces in any part of Europe. Thus, we seek to enhance deterrence by establishing East-West parity in the capability to employ and sustain military action.

A major opportunity to advance the Vienna negotiations developed out of my meeting with General Secretary Gorbachev in Moscow on May 11. Mr. Gorbachev presented me with specific numerical ceilings and a more detailed timetable for the proposal the East had introduced earlier in Vienna. These figures were formally tabled just before the NATO Summit.

The President concluded that the specific Warsaw Pact proposals reflected tacit Eastern acceptance of the Western concept and framework for CFE and that the time was ripe to give the negotiations a major push. The President decided to advance a four-part augmentation of our original proposal. At the Summit, the plan was universally lauded by our allies. Our proposal calls for:

One, locking in Eastern acceptance of the proposed Western limits on key elements of ground forces. That would mean fixing common ceilings on the numbers of tanks at 20,000, on armored troop carriers at 28,000, and on artillery pieces between 16,500 and 24,000, depending on the resolution of definitional questions. Equipment reduced would be destroyed.

Two, expanding the West's original proposal to include limitations on all aircraft permanently based on land and on helicopters throughout the Atlantic-to-the-Urals area at 15 percent below the current NATO total. All reduced equipment would be destroyed.

Three, an agreement between the U.S. and the USSR to each reduce their combat manpower stationed in Europe outside of national territory to parity at 20 percent below current NATO levels, with the resulting ceiling on U.S. and Soviet ground forces stationed in Europe at approximately 275,000 troops. Withdrawn soldiers and airmen on both sides would be

demobilized. This personnel ceiling would require the Soviets to withdraw approximately 325,000 military personnel from Eastern Europe, thereby reinforcing the objectives of the stationed forces ceiling in the original Western proposal.

Four, an agreement on acceleration of both the Eastern and Western timetables for reaching a CFE agreement along the lines I have just outlined and for implementing the required reductions. The Soviet proposal called for full implementation of an accord by 1997. The President set a goal of completing an agreement in six months to a year with completion of required reductions by 1992 or 1993.

These provisions would oblige both sides to destroy significant amounts of equipment. Most importantly, the Warsaw Pact's preponderance in critical components of military strength would be eliminated.

These efforts will not undercut NATO's defense modernization plans. They should be understood as part of a comprehensive approach to improving our security through both force modernization and arms reduction and control.

The Western governments are now in the process of preparing these augmentations of our original proposal with the goal of presenting them at the opening of the third round of negotiations in Vienna on September 7. In addition, the West is continuing to develop the specific elements of its verification regime and a package of "stabilizing measures," which are designed to amplify the benefits of the equipment ceilings. Work is also continuing apace in the negotiations with the East on the development of agreed definitions and counting rules.

Both sides now agree in principle that there should be subceilings on forces on foreign soil in Europe, limits on any one nation's forces and subzones. However, there are some important differences in the way East and West apply these principles. The East has yet to advance its verification regime, but we expect them to be fairly forthcoming.

The Broader Implications of the President's Proposal

I don't want to get lost in numbers here. Arms reduction and cont[illegible]s much more than a matter of simple subtraction. And the President's initiative is more than a military concept.

Our proposal has far-reaching political implications for bringing about the whole and free Europe that we seek. We are seizing this opportunity to diminish the shadow Soviet military power casts throughout Europe. We seek to free Western Europe from the threat of aggression or political intimidation by superior Warsaw Pact forces. Finally, we want to help free the political reform process in Eastern Europe from the heavy weight of an excessive Soviet military presence. While we tend to see the Soviet forces as a potential invasion force, to millions in the East the Soviets remain an occupation force.

In sum, we want to free all of Europe to become a center of cooperation, not confrontation.

The Role of Nuclear Weapons in NATO's Strategy

At the Summit, the President also led the Alliance in taking a second important step toward the future: Western agreement on the components of a "Comprehensive Concept of Arms Control and Disarmament." This achievement demonstrates NATO's ability to adapt to change while maintaining our fundamental

conviction that nuclear weapons play a critical role in ensuring the effectiveness of our deterrent strategy. In light of the existing imbalances in conventional forces, the Alliance agreed that any negotiations on short-range nuclear forces could begin only after the implementation of a CFE agreement is underway. Moreover, any negotiated SNF reductions will not be carried out until the CFE agreement is, in fact, implemented.

The Summit Communique underscores, literally in fact, that our objective in SNF negotiations would be to achieve partial reductions in these forces. The Alliance is committed, for as long into the future as can be foreseen, to maintain an appropriate level of land-, sea-, and air-based nuclear systems, including ground-based SNF missiles.

Thus, the Alliance reaffirmed our long-shared conviction that nuclear weapons make an irreplaceable contribution to the credibility of NATO's deterrent posture. We hope the catastrophic potential of nuclear escalation in any conflict will continue to overwhelm the calculations of any potential aggressor. Even at conventional parity, nuclear weapons will play a unique role in our strategy.

New Missions for NATO

The third step forward by the President at the Summit was his call for the Alliance to address new problems. He invited our Alliance partners to consider new missions for the Alliance. As we succeed in easing down the military confrontation in Europe, we must direct the Alliance toward new challenges. NATO will always have as its central purpose the maintenance of collective Western security. However, the focus of Alliance activities in a more benign European security

environment will obviously be different than it has been during the past 40 years.

First, the President spoke of our interest in furthering the decentralization of political, economic, and social authority in Eastern Europe. Even as we protect the West, we must reach out to the East to give substance to our commitment to overcome the division of Europe.

In this regard, NATO's role as a political consultative forum and our commitment to the Helsinki process could be more effectively used to synchronize Western approaches to the East. Together with activity in the European Community and other Western institutions, the United States and its allies should develop a coherent strategy for dealing with change in Eastern Europe.

Second, the President also noted the newly recognized dangers to our security and well-being posed by threats to the environment. He proposed new efforts that the West might undertake to help the East rectify its massive pollution problems. In addition, the Allies are committed to allocating more resources to certain non-military endeavors that complement the functions of the European Community and other European cooperative institutions, for example, on environmental matters and scientific cooperation.

Third, the President focused attention on the need for cooperation in dealing with the array of security threats, particularly those posed by regional conflicts and the proliferation of chemical and nuclear weapons and their delivery systems.

It is not necessary for NATO to develop highly visible unified responses to all these new security threats, nor should our efforts be limited to cooperation among Western countries. These new threats menace allies, friends and adversaries alike. We have signalled our readiness to work with all concerned nations to counter them.

CONCLUSION

The success of the Summit, and indeed of the Alliance itself, is testament to the enduring strength of the political, cultural, and economic ties that have united America with our European allies for forty years. As the President has stressed, America is and will remain a European power.

In Brussels, we and our Alliance partners set forth ambitious plans for the future. We made important headway on the security agenda, having successfully set guidelines for the development of our nuclear and conventional force postures and arms control policies. In addition, we focused attention on the need for the members of the Alliance and other Western states to address a much broader agenda that confronts us in Europe and the world during the 1990s.

But, most importantly, during this 40th Anniversary of the signing of the North Atlantic Treaty, and at a time of great change in East-West relations, we and our Alliance partners have forged a new basis for unity.

Thank you.

The CHAIRMAN. Thank you.

Because of the shortness of the time and the fact that I think most of our colleagues are going to turn up following their caucuses, we will limit the first round to 5 minutes. If we have more time, then good, we will repeat.

So, I would ask the sergeant at arms to limit us to 5 minutes.

I have two questions.

First, it does not seem as if the Soviets are too nervous about an expanded role of Solidarity in Poland and the events in Hungary. I was wondering if you got the feeling when you were over there that as long as countries do not leave the Warsaw Pact and pay modest obeisance to the word "Communist" in their economy, even if they don't follow it, that they will leave them be. Or is that being too optimistic?

Secretary BAKER. Well, I am not sure that I can definitively answer that question for you, Mr. Chairman.

I tend to share your view. I think that what is taking place in Eastern Europe is dramatic. In a sense it, too, is revolutionary. I think that it is real, and to the extent that it takes place in the political and economic arena, without representing in their minds, at least, a threat to them from a security standpoint, it would be my view that it would probably be permitted to proceed along.

The CHAIRMAN. Thank you.

Now, turning to Germany, East and West Germany, we talk about a united Europe, but do we want a united Germany? My own view has always been that an armed Germany could not be united; a united Germany, to be accepted by the rest of Europe, would have to be unarmed. That obviously is not practical in today's circumstances.

What is your own view with regard to long-range possibilities of unification in Germany?

Secretary BAKER. Well, as you know, Mr. Chairman, there has been in the past some nervousness on the part of some on the question of reunification of Germany.

I think the President made it quite clear in his speech in Mainz, following the NATO summit, that one of the goals of NATO for the future should be to work toward a Europe, as he put it, that is whole and that is free.

Reunification has, of course, been a goal of the NATO alliance, extending almost back, probably back to its formation, and was reaffirmed in I think it was 1967. I prefer to speak of it in terms of normalization of relations between the two Germanies on the basis of Western values.

I think it is the view of the United States that there is nothing inherently evil or nothing that we should be unduly concerned about in the normalization of relations between the two Germanies provided it is done on the basis of Western values. The President is calling for a Europe that is whole.

The CHAIRMAN. You mentioned in your statement the problem of the environment.

I was wondering how the administration is moving ahead and how it had been discussed when it comes to organizing this conference that will be held in the next couple of years, the International Conference on the Environment.

Is that moving ahead?

Secretary BAKER. There are any number of proposals, Mr. Chairman, for international conferences on the environment. It has become a very popular political and foreign policy issue, and many countries are offering to host such conferences.

As you know, the President, during the election campaign, committed to host his own international conference. But the details, the format, the subject matter, all of that has not as yet been worked out, although there are discussions going on internally now with respect to when that might be, what it might cover, at what level it might be held, and so forth.

The CHAIRMAN. Are those discussions going on not only internally, but with other countries?

Secretary BAKER. The discussions so far with respect to any conference to be held in the United States have been pretty much internal, although, as I mentioned earlier, there are any number of countries that are seeking to host international conferences on the environment. As those come up, of course the President makes the point that he, too, has a commitment out there on the table to host an international conference.

He discussed this in some detail, as a matter of fact, when we were in Japan for the Emperor's funeral early in his administration, and it has been discussed on a number of occasions with other countries as well.

The CHAIRMAN. Thank you.

Speaking of international conferences, was the 1991 conference, the Helsinki Conference on Human Rights, discussed on your trip to Europe?

Secretary BAKER. That was discussed in my trip to Moscow, in the Moscow ministerial in May. I do not recall it specifically coming up in conjunction with meetings we had around the NATO summit.

The CHAIRMAN. Thank you.

My time has expired.

Senator Helms.

Senator HELMS. Thank you, Mr. Chairman.

This morning, Mr. Secretary, you and I were just outside of the meeting room at the White House. I inquired of you about the cargo scan x-ray system for the Votkinsk portal monitoring facility.

Now, I said that I hoped that you would check on it, and you were good enough to give me the answer.

I am worried about this. This is an important part of our monitoring system for the missiles under the treaty of last year. We use that, or will use it, when it is installed and operative to x-ray the canisters and see if the Soviets are cheating on the missiles.

Now did you tell me when we came in that the equipment is there?

Secretary BAKER. Senator, let me speak to that generally. Let me start off by saying that the record of compliance on the INF Treaty generally has been quite good.

There have been a few cases where we have raised anomalies with the Soviets, and I have to tell you that they have hastened to resolve those to our satisfaction.

We were delayed, quite frankly, in readying the cargo scan x-ray equipment that you are talking about for installation. Its testing now has been completed. The treaty does require that we assure the Soviets that this equipment cannot perform functions unrelated to the treaty, and we are in the final stages of readying documentation and providing them with a demonstration that will provide that assurance, we think.

There has never been any question raised by them about our right to install imaging equipment, and the site is actually being prepared for installation.

So, we think it will not be too long before we will have that cargo scan equipment in place and operative.

Senator HELMS. Mr. Secretary, you have never misled me, never once. I know that you believe what you are saying here because it is what's reported to you.

But I find it a little bit incongruous because Dr. Manfred Eimer, who is the Assistant Director of ACDA, says that the x-ray equipment has not even yet been shipped to the U.S.S.R. and will not be installed and will not be operational, at the earliest, until October 1989.

Now, I just sent one of my people to call ACDA again, the Arms Control and Disarmament Agency, to see if they were mistaken, and they have confirmed, or reconfirmed, what they told me last Thursday.

Secretary BAKER. I don't think I said that the equipment had been shipped, and I didn't say it was onsite. I said that the site was being prepared for its installation and we were on the verge, we think, of satisfying the Soviets that the equipment cannot perform functions unrelated to the treaty.

I also said that we were delayed in readying the equipment for installation, but its testing has now been completed.

So, I don't think there is any daylight, Senator, I don't believe there is any daylight between what I've said and what you've just said. I didn't say it had been shipped.

Senator HELMS. Now, again, Mr. Secretary, you have never misled me and I don't suggest that you are now. But under the treaty, that x-ray equipment was scheduled to be operational on the site last December 1. And the Soviets found one thing wrong after another to delay it.

We have not x-rayed one canister under this great INF Treaty that was ratified, approved by Congress and ratified.

Is that correct?

Secretary BAKER. Well, I'm not going to suggest to you that we've x-rayed any by the cargo scan x-ray process. I am told here that we continue to inspect Soviet missiles in accordance with the treaty and we are satisfied that there have been no violations.

Senator HELMS. Well, how do you do it?

Secretary BAKER. I guess they are visually inspecting the missiles. I can't answer that for you. But that is what I am told, and I have no reason to disbelieve that.

I'm also told that we're making good progress on getting your x-ray equipment in there, and I have no reason, frankly, to disbelieve that. I mean, that's just what I've been told since you asked me the question at the leadership meeting this morning.

I inquired. I said I want to know what the facts are, and there they are.

Senator HELMS. I appreciated that.

Would you check with your folks when you get back and ask them to give me a ring and explain the disparity between what ACDA says and what your folks have told you.

Secretary BAKER. I don't think there's a disparity, Senator.

I'm not saying that the machinery has been shipped.

Senator HELMS. Well, how do you use it, then?

Secretary BAKER. You don't use it until it gets over there.

Senator HELMS. And we're supposed to, under the treaty, to have had it operational last December 1.

Secretary BAKER. Well, there are probably some other deadlines that we may not be meeting, either. But we're doing the very best we can. And as far as we know, we are inspecting Soviet missiles in accordance with the treaty, and we are satisfied that there have been no violations.

Senator HELMS. Mr. Secretary, my time is up.

Now we have had very few disagreements, but this one is about that wide [indicating]. I don't see how you can suggest that——

Secretary BAKER. Give me the name of the person you mentioned in ACDA and we'll see if there is any discrepancy between what their view is.

[General laughter.]

Senator HELMS. All right. His name is Dr. Manfred Eimer—e-i-m-e-r.

Do you know him?

Secretary BAKER. E-i-m-e-r? No, I don't know him.

Senator HELMS. I just had them call ACDA, and they said what we told you is true.

So, we're either monitoring that or we're not. I don't see how you can monitor it if you don't have the x-ray equipment.

The CHAIRMAN. Thank you very much.

Senator HELMS. Thank you, Mr. Secretary.

The CHAIRMAN. Senator Simon.

Senator SIMON. Thank you.

Mr. Secretary, I apologize for being late. I may have missed some things.

If I may get into non-Soviet territory since we have you up here, I am told that Voice of America could increase its broadcasts into China, in Mandarin, very easily, from 11 to 15 hours and expand some of its other broadcasts.

It seems to me because the people of China, even with the jamming, are so reliant on Voice of America, as well as BBC, that it is in everyone's best interest to see that that takes place.

Are you aware of what the situation is, and is there anything that we can do to further that?

Secretary BAKER. Senator, all I am aware of on that particular issue is that we have increased the frequency of Voice of America's transmissions to 12 hours a day, from a lower level.

I cannot answer for you whether we could increase it to 15. But I certainly would be pleased to look into that.

[The information referred to follows:]

The Voice of America has increased its Mandarin broadcast hours into China 50 percent since the beginning of the crisis, from 8 to 12 hours a day. It has also increased the number of frequencies on which the signal is carried, including some medium-wave frequencies that are more difficult to jam but have a shorter range.

VOA currently broadcasts from 4 to 10 in the morning, and from 7 to 10 at night Beijing time. Adding more daylight hours would not be productive, since atmospheric interference renders reception extremely poor even without Chinese Government jamming. With 12 hours of Mandarin and one-half hour of Cantonese, VOA is now the primary source of Western radio broadcasts in China.

The increase in broadcast hours has put great strain on personnel resources. VOA has been actively recruiting new Mandarin-speaking broadcast journalists since last year. Two of these new employees are now at work, and others are in the pipeline. VOA has also hired a number of temporary employees, but the need to train them has meant that the existing permanent staff members have had to bear most of the burden of the increased workload.

Senator SIMON. It just seems to me that right now, it is in our best interest to get as much information in there as possible.

Secretary BAKER. I agree with that.

Senator SIMON. When you were up for confirmation, I mentioned to you that starting with President Ford, each President, up until the present President, has issued an Executive order prohibiting the CIA from being involved in any assassinations. The indication was that there probably would be such an Executive order issued also on the part of President Bush. But so far, there has not been one.

It does seem to me that it's in everyone's best interest to have such an Executive order.

Secretary BAKER. Senator, I am quite convinced that that is the policy of the Bush administration, and I believe that the prior Executive order is still in full force and effect.

Senator SIMON. All right. Even if we can have just a simple statement by you, even if it is a letter to me that I can insert into the Congressional Record, I think that would be helpful.

Secretary BAKER. I don't see any problem with that.

Senator SIMON. OK.

Finally, I met with some people in Illinois of Lebanese background over the weekend. They are very much concerned about the Syrian blockade of the Christian enclave there and a good portion of Lebanon.

What realistically can we do to communicate to Syria our concerns, not on weapons getting through, but on food and necessities getting through to people who live in this area?

Secretary BAKER. I think we can do a fair amount, Senator Simon, through others, and we are. We have communicated our concerns in this regard. We have spoken to the Soviets about this. We have spoken to any number of Arab countries about this problem.

We believe that the message is getting through. We strongly support the Arab League's initiative in Lebanon, and we are, of course, calling upon all sides for a cease-fire and for the withdrawal of all foreign forces. Those have been elements of our policy for quite some time.

But we are making our concerns known in ways that are available to us to the Syrian Government.

Senator SIMON. Then, finally, in regard to the South African——

Secretary BAKER. May I say one final thing on that?

Senator SIMON. Yes.

Secretary BAKER. When I was in Moscow at the ministerial in May, in connection with the meetings both with General Secretary Gorbachev that I had and the meeting with Foreign Minister Shevardnadze, we discussed the issue of Lebanon and we agreed, as a matter of fact, on an agreed statement with respect to Lebanon. We concluded from those meetings that the Soviets would, in fact, try to be helpful to the extent that they could with Syria.

Of course, they have more influence there than we do.

Senator SIMON. Do we have any sense that they are following through?

Secretary BAKER. We believe that they are genuinely interested in resolving that issue, the issue of Lebanon peacefully. We think that they have, in fact, communicated with the Syrians about this.

We hope they have because they indicated to us that they would.

Senator SIMON. Then, in the South African situation, I am pleased that we seem to be moving ahead on the Namibian independence issue.

In regard to South Africa itself, is the administration ready to move on any kind of initiatives to make very, very clear to the Government of South Africa that we want peaceful change, that we want to see apartheid, the injustice of apartheid, taken away?

Secretary BAKER. Senator Simon, I met with the Foreign Minister of South Africa when I was in Rome on the way to the NATO summit, I guess the first high-level meeting our administration has had with a representative of that government. We made that point during the course of that meeting.

I thought it was interesting that Mr. Pik Botha, who is the Foreign Minister and a member of the same party as Mr. De Klerk, indicated to me that his party supported the abolition of apartheid. He said, his exact words were, I think, "The days of white domination are over and we are going to campaign on this platform."

We had said to him that our policy was to make it abundantly clear that we abhor apartheid, that we want to see it abolished in favor of a nonracial, representative democracy.

Now, obviously, the proof of the pudding is in the eating, and it will remain to be seen what steps are taken over there. But the words were right, and we were somewhat encouraged by that.

We will be coming up to see you and others I hope in the near term to discuss with you what we hope might be a unified approach to this very, very difficult foreign policy/political issue that we face.

Senator SIMON. I welcome that visit, and I thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Senator Lugar.

Senator LUGAR. Thank you, Mr. Chairman

Mr. Secretary, in previous appearances before this committee, you have affirmed the very strong support of President Bush and yourself for the multilateral aid initiative in the Philippines. I raise this question because after negotiations in which our country has been involved, all parties affirm the importance of the success of the MAI for the Philippines and the importance of the success of MAI for our relationship with the Philippines. As we approach

forthcoming security negotiations, the pledging conference in Tokyo has been scheduled for July 3 through 5, and I am told the Japanese will be represented by their Foreign Minister, and by Mr. Manglapas and Mr. Villanueva for the Philippines.

Are you prepared to indicate how the United States will be represented at that time?

Secretary BAKER. Yes, sir. I am, Senator.

I just decided this morning, as a matter of fact, the decision that I will represent the United States myself.

This is a matter that we think is very, very important. I will be, at the time, on my way from the ASEAN ministerial to meet the President at the beginning of his trip through Eastern Europe in Poland.

Well, actually, that's not correct. I will be on my way to the ASEAN ministerial, and, rather than flying 22 hours all the way, straight to Brunei, I determined this morning, in light of the importance of this, that it would probably be better to leave a little early, go to Tokyo, attend the pledging conference myself, and then go on to Brunei. So, that's what I'm planning to do.

Senator LUGAR. I'm very appreciative that that is your decision. I think that your participation is very important for the success of this conference.

Do you have an idea with regard to our own coordination of activities as to a U.S. coordinator for this project, or has that not progressed through the administration?

Secretary BAKER. We do not, as yet, have an individual identified, Senator Lugar. We had someone in mind and, to be very honest with you, it didn't work out. We're still looking for someone because we recognize and appreciate the importance of this initiative, and we think it is important that we have someone to whom that single responsibility is delegated.

We are still conducting our search.

Senator LUGAR. Let me ask this in reference to China.

There have been announcements by the Chinese that certain foreign businessmen, including businessmen from the United States, have either stayed in China or returned. They were congratulated on Chinese TV in a way that suggested they were being used to endorse activities in China.

It is a very difficult predicament, obviously, for our business people who have left China, I suppose, and for other nationals.

What is your advice and counsel to American businessmen who have left China and who now are in a predicament of being summoned back by the Chinese, with the thought that their business operations or the future for their companies and private enterprise might be jeopardized if they did not return?

Secretary BAKER. Senator Lugar, we still have a travel advisory in force with respect to Americans traveling to the People's Republic of China. That remains in force and we would, I think, counsel against Americans returning at this time.

Senator LUGAR. Is there a survey being completed in some part of our administration with regard to sophisticated equipment sent to China, not necessarily of a military character? Questions about military equipment have, I think, been answered by the President.

But I mean sophisticated equipment under the control of American owners.

Obviously, if the American owners have left this equipment in China, it is not under observation and control. I suspect at some point collectively we'll need to find out what we have over there and what its fate might be.

I just wanted to know whether that is being pursued at this point by our Government.

Secretary BAKER. Senator Lugar, it may well be. I am not personally aware that we have such a review ongoing.

Hang on for just a second.

[Pause.]

Secretary BAKER. I think it is an excellent idea, Senator. We should have, and we now have a review ongoing.

[General laughter.]

Senator LUGAR. I thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Biden.

Senator BIDEN. Mr. Secretary, welcome. I apologize for not being here for your statement. From 2 to 2:30, I was required to make a presentation on the drug issue at another forum in the Senate. I'm sorry.

Mr. Secretary, over the past 48 hours, the administration has released outlines of an arms control initiative to be tabled this week by our new ambassador, Richard Burt, in Geneva. This initiative, as I understand it, consists of basically five proposals, each apparently intended to be implemented even before, as I understand it—and emphasize—even before a START Treaty is finally negotiated and/or signed.

The first is onsite inspection of Soviet SS–24 missile production.

The second is onsite inspection that would allow the counting of the actual number of warheads on each of these missiles.

The third is a ban on all telemetry encryption.

A fourth is a ban on depressed trajectory missile testing, which is not going on at the moment.

A fifth is a comprehensive data exchange.

Now, I think these are all absolutely positive and none of the five elements is objectionable as part of a finalized START Treaty. But I am a little perplexed, because the proposal to achieve these significant five steps before the details of a START Treaty, or even a framework is finally agreed upon—even though we have the Reagan framework, I'm not sure what the position of this administration with regard to it seems to me to be a little bit disturbing.

I will be very blunt with you. It raises, at least in this Senator's mind, a couple of concerns. One concern is the possible motivation of the administration, and the other is the possible consequences.

As to the administration's motive, a variety of explanations come to mind, some of which I find troubling, none of which may be true.

The first is that the administration is trying, arbitrarily and perhaps with a touch of egocentrism, to put its own stamp on a START Treaty which has already been carefully negotiated and on which a few key issues remain. This raises the specter, when I was a young man here in the Senate, of what happened during the

Carter administration, in March 1977. The Bush administration is risking a major blunder with no commensurate, potential gain if it attempts to make its own mark on the START Treaty so late in the negotiating process.

Another concern or possible explanation is that the initiative represents a way of diverting attention from the real START issues that remain outstanding—that is, the ABM Treaty, mobile missiles, and SLCM's. The administration cannot seem to bring itself to address and resolve even what the United States wants in the negotiation on these issues.

The third explanation is that this initiative, by elevating verification to a perceived obstacle, constitutes a way of downplaying the START process because the administration has bought on to the idea, championed by Dr. Kissinger, that we should not enter the START Treaty until we have an agreement on conventional arms. As we both know, this could mean an indefinite delay in completing a nuclear arms treaty on which most of the work has already been done.

Still another explanation, and I hope the accurate one, is that the administration actually hopes the initiative will lead to positive developments, paving the way to an early START Treaty.

If that is so, it seems to me we have to consider a second question, one that arises from this initiative, and that is—What are the consequences and potential risks of this new proposal?

It seems to me the first and obvious risk is the Soviet response. The Soviets could react to this abrupt change of signal as they did with the Carter administration in 1977, which was a serious setback for arms control, from my perspective, anyway. Or they could counter by proposing analogous verification techniques. If we want to begin looking at their SS–24 facilities before we have an agreement, they may conclude that they want to look at our SLCM plants and deployments.

In short, have we thought this thing through?

The second obvious risk concerns the complexity of what you are proposing. Even if the Soviets did acquiesce in this initiative, it may very well require a complex negotiations involving inspections conducted on issues of low trajectory testing and encryption.

In short, does not the administration initiative conjure up the possibility of being sidetracked by very lengthy negotiations on an agreement before the agreement? Would you do that by Executive agreement or would you do it by treaty?

As against these risks, what do we stand to gain before we have a treaty negotiated?

I have more that I want to say, but I am being handed a note that my time is up. On important matters, we always limit the time.

[General laughter.]

Senator BIDEN. It's the Senate's way.

[General laughter.]

Senator SARBANES. Would you like me to yield you some time?

Senator BIDEN. If you would. Would you yield me a couple of your minutes?

Senator SARBANES. Mr. Chairman, I think I am next in the rotation. I would be happy to yield a couple of minutes of my time to Senator Biden.

The CHAIRMAN. It is agreed.

Senator BIDEN. Thank you.

Senator MURKOWSKI. In the meantime, I have a short question.

Senator BIDEN. I really don't have a short question. I think there is nothing more serious in this Senator's mind, quite frankly, than making sure that what has been a phenomenal undertaking and progress made by the last administration on START not become sidetracked, either deliberately or inadvertently. As I said, as against these risks, What do we stand to gain?

Concerning the ban on encryption, the Soviets have already stated their willingness to make this a provision of the START Treaty. On the ban on low trajectory testing, it is a very sound objective that relates to stability, but no such testing is now occurring.

On data exchange, of course we would expect a comprehensive exchange as a part of a mutual verification regime after we had a treaty anyway. And on the actual counting of warheads, that perhaps is a good procedure. We could, of course, achieve the same result, alternatively, through the counting rules based on the number of warheads a missile has been tested with or is presumed to have.

Finally, concerning the inspection of the SS–24 plants, the same question arises: Why now?

We know a great deal about the SS–24, and we are developing a body of expertise on plant monitoring under INF, which gives us access to the SS–25 facility.

Mr. Secretary, I know some administration officials have voiced concern about verification as a potential obstacle and they don't want this treaty to be dead on arrival to the Senate. But it seems to me that there is not that sense up here, with a relatively few exceptions, that somehow you have to get a verification regime in place even before you have in place a position on the three critical and outstanding issues on the START agreement.

So, my question is this, Mr. Secretary. Can you ease my concerns about the motives behind and the possible consequences of this unexpected and unusual verification initiative prior to any serious negotiation by this administration on the outlines of the basic elements of a treaty?

Secretary BAKER. Senator, let me try to answer you by saying that I think you are looking for an ulterior motive and there isn't any.

You used the word "before" about four or five times, and you basically made it sound in the course of your question as if this were a precondition to negotiating a START Treaty. It is not that at all.

It is intended to accelerate and enhance the negotiation of a START Treaty. The instructions to our negotiators are quite clear on this point. There was some of what I think was inaccurate reporting of what was coming over the weekend, which may have led to your concern. But if I might suggest it, I really believe it is totally off the mark.

You yourself pointed out that without confirming—and I cannot confirm what the specifics of these verification and stability measures are because we have not as yet tabled them with the Soviets, and it is not a good practice to be confirming something until it is tabled. So, I will not comment one way or the other on your recitation of what they might embrace.

Let me simply say that the President's goal and purpose—and I think if you had been at the leadership meeting this morning you would have had a chance to hear him say this himself—is to accelerate and enhance the prospects for a START agreement.

There is no desire or inclination here to throw something up as a precondition or require that verification and stability measures be agreed to before the other elements of a START Treaty be agreed to, and the instructions to our negotiators are quite to the contrary, if I may say so.

Senator BIDEN. That's reassuring.

Secretary BAKER. There is, on the other hand, a sense that verification is a very, very important issue, and it is particularly important when we bring a treaty back up here and ask you to vote to ratify it.

So, we do not lose anything, and, in fact, we might gain quite a bit by having a detailed discussion of some of the things that, as you yourself pointed out again, have actually been discussed in the prior START discussions.

So, I really think you are seeing something here that is not there.

It is the objective of the President and the objective of this administration to build upon the progress that the Reagan administration made in START, so that we can bring back a good treaty to submit to you for ratification. That is what the President said, I think in no uncertain terms down at the White House this morning at the leadership meeting.

Senator BIDEN. I would not worry too much about verification bogeymen up here.

Secretary BAKER. Well, that's not what led to it, although I do think an argument could be made, if I might suggest it. We will have to answer a lot of serious and important questions about verification. Nothing is lost by engaging now with the Soviets on these very, very important issues.

Senator BIDEN. I thank my colleague for the extra time, and thank you, Mr. Secretary.

The CHAIRMAN. Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman.

Mr. Secretary, I am not going to take up your time to discuss salmon interception on the high seas today. Let's move on to the issue of Poland.

Our President is going over there on the eighth of the month, and we have seen an extraordinary political restructuring in Poland of late.

I am curious to know what you are going to be able to do over there that is meaningful. We have talked about preferential trade status and United States-backed investments in Poland. But I think the restriction on the Overseas Private Investment Corporation participation and limiting it to a 2-year term private sector fi-

nancing on a guaranteed basis is certainly not evidence of the United States trying to do something in a timely manner.

I am wondering if you feel what the President is going to be able to take over there from the Congress is wholly adequate at this time or if you need substantially more from the Congress, because time is running out.

Secretary BAKER. Senator Murkowski, I am not sure that we need substantially more from the Congress if we can get the elements of what the President mentioned in his Hamtramck speech.

He talked about OPIC, he talked about GSP, he talked about technical economic assistance, which, of course, does not require legislation.

I think it is important, as I indicated in my opening statement, that we recognize that there are massive environmental problems in Eastern Europe and we ought to be thinking about how we might help, even if that is only by way of technical assistance.

I am not aware of anything as we sit here today that we need beyond what has already been requested.

The House Foreign Affairs Committee has already reported out the bill to permit OPIC to operate in Poland as well as Hungary, and to grant the GSP benefits to Poland. That bill is now before the House Ways and Means Committee. There has been some talk about adding to it. We hope that is not done because we would like to have that legislation completed before the President goes to Poland.

So, what we really would like to ask the Congress for is complete the legislation that we have asked for, and I think that we can have a productive trip.

Senator MURKOWSKI. Do you know any reason why that legislation pending would not receive adequate support? I cannot understand why it would be held up.

Secretary BAKER. No, sir. I hope and believe it will receive adequate support.

Senator MURKOWSKI. Turning back to China, very briefly, we looked on China as a substantial stabilizing force until just a short time ago. We looked at China to play a role in North Korea, on the Sino-Soviet border, on the Tibetan issue, and certainly in Cambodia.

Now we are wondering whether China may renege on its vow not to aid the Khmer Rouge.

How do you, as the policymaker, handle this very careful process of tiptoeing through the tulip bed, so to speak, with China, when we recognize that there were thousands of people that were killed with the authorization of the current government and the realization that there are going to be tremendous pressures for business as usual, the realization that some of our allies are not going to have the same commitment to human rights that the United States does? And how do you parlay this into recognizing that we have a tremendous moral obligation, that those atrocities can not be forgotten, and still go on and deal with an administration in China that is very much committed to trying to heal the surface of those wounds and getting on with the movement of China into the 21st century?

Secretary BAKER. Senator, we have to take all of those things into consideration.

One of the things we have to do is be careful that we do not take actions, at least in our view, actions that hurt the Chinese people.

I know that has been at the forefront of the President's thinking as he has developed our administration's response to this very unfortunate episode.

Let me say beyond this that I think the administration has very clearly expressed our outrage over the brutal and unacceptable use of force against peaceful demonstrators.

The President and others of us from time to time have made it clear, I think, that we stand with those around the world who seek greater freedom and greater democracy. We have said, for instance, that the whole world has seen what happened in Tiananmen Square, where large numbers of peaceful demonstrators were killed by army units.

We have condemned and do condemn the use of live fire against unarmed civilians, which is what happened in Tiananmen Square. Labeling demonstrators who are seeking basic human rights "counterrevolutionaries and hooligans," as has been done, we do not think will alter the reality of what happened in Tiananmen Square on June 3.

We have said and I say here now that the persecution of people for the exercise of basic human rights, such as freedom of expression, freedom of association, freedom of the press, is reprehensible and deplorable.

The reports of arrests of students and workers are very disturbing. The White House announced today that the President had directed us to call in the Chinese Ambassador yesterday, which we did, and appeal for clemency with respect to those who have been arrested in China.

The detention or arrest of these people for exercising their basic human rights, Senator, is clearly contrary to internationally recognized standards.

Now, in determining how to respond to these actions, which are, indeed, brutal and are, indeed, outrageous, I think the President was mindful of the need to preserve, to the extent that we can, to preserve what is a very, very important relationship. And, as a result of that, he took some very carefully crafted steps.

You referred to it as "tiptoeing" along the line between these two countervailing considerations.

He has suspended all government-to-government sales and commercial exports of weapons and of visits between United States and Chinese military leaders. We think that that suspension is a strong signal that there cannot be business as usual with a leadership that refuses to recognize the aspirations for democratic reform of its own people.

Other steps have been taken to ensure against citizens of China in the United States being forced to return to China before June 5, 1990. As I mentioned a moment ago in answer to Senator Lugar's question, we continue to maintain our travel advisory with respect to Americans traveling in China.

The President also said, though, Senator Murkowski, that we have to review aspects of our policy in the light of unfolding

events. So, he has proceeded thus far in a manner designed not to harm the Chinese people, including those Chinese people, many, many Chinese people, who have benefited from freer economic and cultural contact with the outside world, and who have benefited from the consequent freer flow of ideas.

Now, in keeping with those principles, Senator, I want to tell you that I have recommended to the President that we suspend all political level Assistant Secretary and above participation in nonmilitary exchanges between the United States and China. If the President should act on that recommendation, that would mean a cancellation of certain travel that is now programmed for some of our Cabinet officers, such as Secretary Mosbacher's trip on July 10.

We will be attempting, as well, to do what we can to postpone consideration of loan applications in international financial institutions at least for the time being, while we continue to review, as the President has said we would do, the further aspects of our policy in the light of unfolding events.

Senator MURKOWSKI. I appreciate that detailed answer.

Thank you.

The CHAIRMAN. Thank you very much.

The Chair recognizes Senator Sarbanes. He has 3 minutes remaining.

Senator SARBANES. Thank you very much, Mr. Chairman.

Mr. Secretary, the President's visit to Poland and Hungary will take place when?

Secretary BAKER. It is just before the economic summit, Senator Sarbanes. I don't have the exact dates, but I suspect the economic summit is the July 14, or thereabouts. So, it will be around the July 11 or 12 timeframe.

Senator SARBANES. All right. So, you will visit Poland and Hungary just before the summit, and then you'll go to the economic summit with the G–7?

Secretary BAKER. Yes, sir.

Senator SARBANES. I'd like to ask when you foresee a meeting between President Bush and General Secretary Gorbachev?

Secretary BAKER. Well, that is still not determined, Senator Sarbanes. There was discussion of that during the course of my trip to Moscow in May, when I met with General Secretary Gorbachev. There was discussion of it as well in my meetings with Minister Shevardnadze, and there is consideration being given to that by both sides. But I cannot give you a timeframe or a date.

Senator SARBANES. Are you of the view that you have to have reached some major accord or agreement to be announced at the summit in order to have a summit, or do you see the summits as providing a basis for an exchange of views and perhaps significantly contributing to the dialog without necessarily having to produce a major agreement?

Secretary BAKER. I see it the latter way, Senator. I don't see that you have to have a major agreement all wired before the heads of state and Government of the Soviet Union and the United States can get together.

Senator SARBANES. What do you think of the notion advanced at the summit that they ought to get together on a somewhat regular basis, at least sufficiently frequently to take some of the intense

media focus off the "summit" and permit sessions to take place ostensibly "in the normal course of business?"

Secretary BAKER. I don't think that will work, Senator. That was one of the ideas, I think, with respect to the economic summit. Those are regularized and it has worked quite to the contrary.

I don't think that it will take the focus and anticipation off just because you decide you are going to have regularized summits.

I really do not favor regularized summits because I think then you are locked into something that is too programmed and going to happen in any event.

But I don't think you need to have some big, major arms control or other package that you are going to conclude in order to justify a summit meeting.

Senator SARBANES. I think the longer you wait to have this first summit, given that the arms talks have now resumed, the more difficult it will be to separate the two. It seems to me this argues for having a meeting in the not too distant future to review the rest of the agenda, must of which is very important.

Secretary BAKER. We will be discussing this in our ministerial meeting in September, Senator Sarbanes, at the direction of both leaders.

Senator SARBANES. Could I also ask this. On page 6 of your statement, you say on terrorism, speaking now of your contacts with the Soviets, "We seek to establish points of contact within our governments and vehicles for information sharing about terrorist groups." That is the extent of your comment.

I wonder if you could elaborate on that in terms of what it is you are trying to do or what you have in mind.

Secretary BAKER. Yes, sir. I would be glad to. We have really gone further than that.

We have historically addressed the United States-Soviet relationship on four areas—arms control, bilateral, regional, and human rights.

I think I mentioned in my confirmation hearings that we thought it might be appropriate to add a fifth category, "transnational or global issues," that know no national boundaries, that, nevertheless, some of which might be of equal concern and importance to the Soviet Union as they are to us.

The best examples of that are environment, narcotics, and terrorism.

We now have begun this dialog with the Soviets, with respect to the possibility of cooperation on matters of international terrorism. They have contacts and relationships that we do not, and we have some that they do not.

This does not mean that we are going to be doing anything that would jeopardize sources and methods of intelligence. I am happy to report to you that all elements of United States Government are participating in this, and I think enthusiastically we have representatives of our intelligence agencies and our law enforcement agencies on a working group that will meet with the Soviets to further develop this idea.

The CHAIRMAN. Thank you very much.

Senator McConnell.

Senator MCCONNELL. Thank you, Mr. Chairman.

Mr. Secretary, we have seen little evidence that the Soviet Union is concerned in any negative way, at least, about what is happening in Poland or in Hungary.

I wonder if it is your view that the Soviets are edging toward accepting self-determination in Eastern Europe?

Secretary BAKER. Well, I got a question quite similar to that from the chairman, Senator McConnell, before you arrived, and my answer was it seems to me that, where it 's political and economic, they are not standing in the way of progress, they are not standing in the way of reform.

It is taking place. It is my sense that if they wanted to shut it down, they would probably be fully capable of doing so. We have seen them do so in the past. They are not doing so, and they themselves are experimenting with democracy and self-determination.

Senator MCCONNELL. Shifting to a different area of the world, I understand there were some talks last week in Washington between a delegation from the Soviet Union and a delegation from the State Department regarding the Middle East. Was the Shamir plan discussed with the Soviets?

Secretary BAKER. Not only was it discussed at that working group, Senator McConnell, I discussed it with both General Secretary Gorbachev and Minister Shevardnadze when I was in the Soviet Union in May. We think this proposal for elections offers us a real opportunity hopefully to move the peace process forward. We think it offers a great deal more opportunity, at least as things now stand, than an international conference approach would.

I hope and believe and I said in my opening remarks that we were quite heartened by the fact that after our meetings in Moscow, Minister Shevardnadze said that he felt that the elections proposal was worthy of consideration. Theretofore, the Soviets had been pretty well wedded to the international conference approach solely.

Senator MCCONNELL. Yes, that was my next question: What was the Soviet reaction to the Shamir plan?

Do you think that the talks will lead to an endorsement at some point?

Secretary BAKER. Well, more of an endorsement than saying it's worthy of being looked at and worthy of consideration? I don't know.

Senator MCCONNELL. Emigration of Soviet Jews has been running at roughly 4,000 people a month. Do you expect this emigration of Soviet Jews to continue at this level? If so, for how long?

Secretary BAKER. Well, I think there is no reason to suspect that it will not continue at that level, Senator McConnell. We really here are faced with having to manage our success. We have been very successful.

We are delighted with that and we hope it continues, and we believe it will continue.

Senator MCCONNELL. Currently, Soviet Jews wishing to emigrate to Israel obtain visas from the Dutch Embassy. Israel obviously would like to make visas available directly from the Israeli Consular Mission in Moscow.

Did your delegation raise that visa issue during talks with the Soviets last week? If so, do you know what the Soviet reaction was?

Secretary BAKER. Yes, we did raise that.

I don't have a reaction for you. I know it was raised. But I was not in the working group, so I am sorry. But we did raise it with them.

[The information referred to follows:]

We take every opportunity, including the June Experts' Talks on the Middle East, to encourage the Soviet Union to restore diplomatic relations with Israel. The Soviets have said that this is an issue for the future. In the meantime, there is an Israeli Consular Mission in Moscow which works under the aegis of the Dutch Embassy's Israeli Interests Section. Visas for Soviet Jews emigrating to Israel are processed by these Israeli Consular Mission officers, but are formally issued by the Dutch.

Senator MCCONNELL. Mr. Chairman, I know that we have a couple of other Senators who I believe have not had a chance to ask questions, and I know we have a vote at 3:30. So, I will yield the balance of my time.

The CHAIRMAN. Thank you very much.

Senator Cranston.

Senator CRANSTON. I'd like to ask one question, if I may.

As you know, a number of Senators, or several Senators, have written to the administration regarding Jackson-Vanik and the potential waiver which the President has spoken about.

Can you give us any indication as to where that matter stands at the present time?

Secretary BAKER. Senator Cranston, the President, when he was over in Europe for the NATO summit, in fact I believe in his speech at Mainz, Germany, announced that he was lifting the no-exceptions rule with respect to transfer of strategic items to the Soviet Union. That, of course, is the rule that was imposed through agreement with our allies when the Soviets went into Afghanistan.

He also said at the same time that he would want to seek to repeal or suspend Jackson-Vanik if we saw institutionalization of the freer emigration policies that the Soviet Union has recently been following.

I think we would like to see some more progress toward the codification of those procedures into law in the Soviet Union. But I think the time has come for us to give serious consideration to that and that is what the President indicated in his remarks.

Senator CRANSTON. Thank you.

The CHAIRMAN. Senator Humphrey.

Senator HUMPHREY. Thank you, Mr. Chairman.

Mr. Secretary, as you know, but as others might not know, at 4 o'clock, at the Department, Peter Thompson will be sworn in as Special Envoy to the Afghan Resistance. I want to thank you for making that happen.

I wish it had happened some months ago. But we all know the problems of bureaucracy, and finally that is happening. I thank you for that, Mr. Secretary. That was an initiative, as you may recall, of the Congress. Indeed, the chairman of this committee was one of the primary movers in that effort.

We did not get much satisfaction, frankly, on that score from the previous administration, so we are especially grateful to you for moving that right along.

Unfortunately, in announcing the appointment a week or 10 days ago, the White House made no effort to highlight it in any

fashion. I hope that, upon your return, you will encourage your press department, Mr. Secretary, to try to generate some interest in this story by backgrounding the press and taking other reasonable measures to get this story out, because it is very important.

Might you be willing to do that, Mr. Secretary?

Secretary BAKER. Absolutely.

Senator HUMPHREY. Thank you.

Secretary BAKER. I think you're going to do a good job of that by speaking up on it right here, Senator.

Senator HUMPHREY. I want to, in fact, quote our new envoy. Well, I'd better not. He is not delivering these remarks until 4 o'clock.

[General laughter.]

Senator HUMPHREY. So, I'll just skip over that. But he says some good things there.

Secretary BAKER. You'd better quote him. You won't have a better opportunity.

Senator HUMPHREY. I know it. I hate to waste it. But what can you do.

Well, now for something very sobering, Mr. Secretary—not a word of praise, but, in fact, a word of criticism.

I think our response to the slaughter in China has been pathetically weak. I'm glad to hear you describe some proposed changes, some recommended changes, but they are not policy yet. I hope they will become policy.

But in view of the magnitude of the atrocity and the callousness of the Chinese leadership's cynicism in trying to cover this up and to rewrite history, and to tell us that what we saw we did not see, and to hide from the eyes and the ears of the Chinese people the truth, even to the extent now of jamming the Voice of America, these things are just crying out for a stronger response than that which we have heretofore made.

You cited our actions. Indeed, we have suspended military sales. But that is the kind of minimal response you would expect from a decent nation under these kinds of circumstances.

I will confess that I'm not at all sure that, had we taken stronger measures, it would have made any difference. It might not have. I will admit that. But I think we should have tried.

And in the end, because we didn't try, and we took these minimal approaches, I think we looked awfully unprincipled. I think we looked like we cared more about commercial contacts and commercial relations than we cared about human rights. I think we missed, tragically missed, an important opportunity to at least temper the direction of the Chinese leadership.

It might not have done any good. I will admit that. But I think we should have made that try.

Just this afternoon, I met with one of the Chinese students here in this country. I won't say his name because he is already in deep trouble with the government back home. But he left with me a letter on behalf of a host of organizations representing Chinese students on American campuses, which is on my way, now, and which I hope to present to you before you leave.

My question then is, When are we going to have a decision on these recommendations which you have laid out here, the suspen-

sion of intercourse between senior level—I shouldn't use that word, I guess—but meetings between senior level officials and also the postponement of consideration of loan applications, and things of that kind?

Secretary BAKER. I cannot answer that for you. That, of course, is a decision that the White House will have to make. But I would not anticipate that it would be long in coming.

Senator HUMPHREY. Well, I think it's long overdue, may I say, and cannot come a moment too soon. Indeed, it is already shamefully late.

I would encourage you to press that with all dispatch.

Mr. Chairman, is it your intent to go to the vote at 3:30, no matter what?

The CHAIRMAN. I'd like to, but I would want everybody to get their 5 minutes in.

Senator HUMPHREY. Yes, that's my feeling, too.

If you're going to postpone the vote, I'll continue. If not, I'll yield the rest of my time.

Senator SARBANES. You have about half a minute.

Senator HUMPHREY. All right. I'll use it anyway.

Mr. Secretary, you mentioned in your testimony—I just wanted you to know the sentiment—in your testimony you mentioned your conversation with Foreign Minister Shevardnadze about human rights and the need to go beyond the lists approach to human rights to an institutionalized approach.

What was his response? What can we expect? Are we prepared to go forward with MFN and things of that nature only on the basis of the lists approach, or are we going to insist upon an institutional approach?

Secretary BAKER. As I just indicated in answer to Senator Cranston's question, Senator Humphrey, we have an interest, of course, in seeing human rights practices institutionalized there, to the extent that we can.

I must say that we have been pleasantly surprised at the progress that we have been able to make in our relationship with the Soviet Union in the human rights category. I mean, I don't think anybody can really take issue with the statement that they have come surprisingly far over the course of the past 2 years, maybe 3.

Senator HUMPHREY. But that does not answer the question. Are we going to be satisfied with the list approach or are we going to insist upon the institutional?

Secretary BAKER. I'm not sure that this would apply in each and every situation or instance. But, clearly, we would like to see institutionalization. That's what we seek. That's what we think is preferable.

Senator HUMPHREY. Thank you.

The CHAIRMAN. Thank you very much.

I hate to do this, but people are all set for a vote at 3:30. I hate to take this rather rude action to Senator Robb, Senator Mack, and Senator Sanford, who have been here very patiently, and to Senator Kerry. But I think we really should stop now and vote on these nominations, though I won't say they are "routine."

There are some people outside who would very much like to come into the room. So, those who have no need to be here for these nominations I hope would leave at this time. There are about 30 reporters outside.

We thank you, Secretary Baker for being with us. This is the nearest thing to the "question hour" in our country, and we appreciate your coming up here and being as candid as you have been.

Secretary BAKER. Thank you.

Senator SARBANES. Mr. Chairman, I take it we are excusing Secretary Baker with appreciation for his being here.

The CHAIRMAN. Absolutely, yes.

Secretary BAKER. Thank you, Senator.

[Whereupon, at 3:30 p.m., the committee adjourned, subject to the call of the Chair.]

APPENDIX

Responses by Mr. Lambertson to Questions Asked by Senator Cranston

Lethal Aid for the Non-Communist Cambodian Resistance

Question. Is it true that the Khmer Rouge support the proposal under discussion of sending lethal aid to the non-Communist resistance forces as shown by the joint press conference with Beijing with Prince Sihanouk and Khieu Samphan, representing the Khmer Rouge, on or about March 15 of this year in which just such United States lethal aid was called for by both?

Answer. Prince Sihanouk, KPNLF leader Son Sann, and Khieu Samphan of the Khmer Rouge held a press conference March 14, 1989. Beijing Xinjua reported Prince Sihanouk as asking the United States "which up to now has given 'very little help,' to offer more aid to the Kampuchean resistance forces." We are not aware of a Khieu Samphan statement at that press conference in support of lethal assistance.

Question. If the lethal aid in question is given covertly, after notification of the Intelligence Committees, how likely is it that this covert aid could remain covert? Indeed, is the administration assuming that the lethal aid would become overt, even if provided covertly, so as to ensure that the aid would have symbolic political value—assuming of course that the administration does decide to go forward with covert lethal aid?

Answer. If a decision were made, after consultation with the Intelligence Committees of the Congress, to give lethal aid covertly to the non-Communist Cambodian resistance, we would expect that program to remain covert.

While the non-Communist resistance receives military supplies from other supporters from around the world already, we would expect the value of U.S. lethal assistance to be more than symbolic. A continuing increase in the military strength of the non-Communist resistance should be visible to all parties involved, giving the non-Communists increased political strength during negotiations. Of course, this military assistance would also be valuable if there is an attempt by the Khmer Rouge to seize unilateral control in the future.

Question. When the Vietnamese forces withdraw from Cambodia, a date now scheduled for September, will not the administration want to pursue a cutoff of lethal aid to all factions in Cambodia? Under the circumstances, would not lethal aid provided by the United States to the non-Communist resistance only a few months before that date make more difficult, rather than less, the achievement of a cutoff of aid to all factions? Is the administration planning, in any case, to seek such a cutoff of aid to all factions in September of thereafter, when the Vietnamese forces are withdrawn?

Answer. The exact measures to be incorporated in a Cambodian settlement agreement remain to be decided by the parties most directly involved. However, a cutoff of military aid to the Cambodian factions in conjunction with a verified and complete Vietnamese troop withdrawal has been a major point of preliminary agreement, affirmed most recently by China and the Soviet Union at their mid-May summit meeting in Beijing.

We would support an internationally verified cessation of military assistance to the Cambodian groups as agreed to by the parties involved. We do not believe that our provision of lethal assistance to the Cambodian non-Communists now would affect such an agreement.

Question. Is it not rare that the lethal aid to be provided to Prince Sihanouk (and his ally Son Sann) will have only a marginal effect in improving the Prince's bargaining position with Hun Sen, if any at all, since military strength has never been the reason for the Prince's negotiating leverage—but rather his standing internationally and at home?

Answer. While Prince Sihanouk's domestic and international standing has been his greatest strength, we believe that increasing the military strength of the Cambo-

dian non-Communist resistance will add to the Prince's ability to reach with Hun Sen an acceptable agreement, which includes real domestic powersharing for the non-Communists.

Question. If the administration begins to provide lethal aid to the non-Communist resistance, does it have any idea where such a program would end? Is the United States planning to support this faction's efforts in a continuing civil war in Cambodia? Will American advisers be sent with the lethal aid to explain how to use it or to oversee its incorporation into the forces involved? If there is combat, will American advisers be involved? What kind of lethal aid is contemplated?

Answer. If a decision were made to give lethal assistance to the Cambodian non-Communist's resistance, the details of the assistance would be worked out in close consultation with Congress. Its purpose, I would reiterate, would be to strengthen the NCR so as to enhance its political credibility to Sihanouk's bargaining power.

Question. Does the administration believe that is can use its influence in persuading the Chinese to halt lethal aid to the Khmer Rouge, while it fuels the non-Communist resistance with lethal aid and while both are in a coalition together?

Answer. We have discussed with China on a regular basis the need to control the Khmer Rouge in the context of a settlement. We will continue to do so whatever our decision on lethal aid for the non-Communists will be.

The issues of Chinese resistance to the Khmer Rouge—and Soviet and Vietnamese assistance to Phnom Penh—are major elements of a potential settlement agreement. We do not believe that a United States decision to give lethal aid to the Cambodian non-Communists will affect our ability to help bring about cessation of assistance from these major suppliers. We believe that Beijing understands the abhorrence felt by the international community about a possible return to dominance of the Khmer Rouge.

Question. If the coalition between the Khmer Rouge and Prince Sihanouk is only a formal coalition and there is no military cooperation between them, as you argue, why can we not legislate a condition on the lethal aid that the Prince should withdraw from this military coalition before receiving the aid?

Answer. We believe that specific legislative language which imposes conditions on the Cambodian settlement process restricts the ability of this administration, and by extension that of Prince Sihanouk, to achieve the best possible Cambodian settlement, one which is stable and durable and which allows the Cambodian people genuine self-determination.

In such a settlement, the international community agrees that control of the Khmer Rouge will be an absolute requirement. However, we believe the exact measures to achieve this control must be worked out by the parties directly concerned rather than imposed from a distance.

JOINT LETTER FROM FOREIGN RELATIONS COMMITTEE SENATORS

U.S. SENATE,
WASHINGTON, DC 20510
May 17, 1989.

THE PRESIDENT,
The White House,
Washington, DC 20500

DEAR MR. PRESIDENT: We are writing to express our concern about Soviet Foreign Minister Eduard Shevardnadze's recent remarks regarding the INF Treaty. It was reported on May 14, 1989, that Mr. Shevardnadze asserted that the modernization of short-range nuclear forces in Europe was "an attempt to circumvent the agreement on medium-range missiles," and that such modernization would place in question whether the Soviets would eliminate their SS-23 systems under the terms of the INF Treaty.

We find these remarks very troubling. The Senate played an important role in advice and consent of the INF accord and overwhelmingly recommended ratification by a vote of 93 to 5. The INF Treaty requires the elimination of the Soviet SS-23 but does not include short-range nuclear systems under the range of 500 kilometers. NATO modernization plans for short-range systems fall below the 500-kilometer limitation and, therefore, are not covered under the INF Treaty limits and would not violate the treaty's restrictions. Mr. Shevardnadze's suggestion that the Soviets might not abide by the terms of the treaty in response to the modernization of systems which are not covered by the treaty threatens to challenge the integrity of the INF accord, as well as overall confidence in the arms control process.

The signing of the INF accord by the United States and the Soviet Union was an important step in arms control and widely recognized as a significant confidence-building measure for further and more dramatic arms control measures. The integrity of the INF accord is a critical element in our ability to move forward on a broad range of arms control issues.

We would urge you to seek a clarification from General Secretary Gorbachev as to the Soviet commitment to the INF accord and to consult with us on these developments. It is in neither side's interest at this time to challenge that agreement. Both sides should instead be building on the achievements of the INF accord and moving forward to take advantage of the many promising opportunities before us in East-West relations.

Sincerely,

NANCY LANDON KASSEBAUM, *U.S. Senate;* JOSEPH R. BIDEN, JR., *U.S. Senate;* RUDY BOSCHWITZ, *U.S. Senate;* RICHARD G. LUGAR, *U.S. Senate;* MITCH MCCONNELL, *U.S. Senate;* LARRY PRESSLER, *U.S. Senate;* CLAIRBORE PELL, *U.S. Senate;* CONNIE MACK, *U.S. Senate;* ALAN CRANSTON, *U.S. Senate;* PAUL SIMON, *U.S. Senate;* CHRISTOPHER J. DODD, *U.S. Senate;* JOHN F. KERRY, *U.S. Senate;* PAUL S. SARBANES, *U.S. Senate;* TERRY SANFORD, *U.S. Senate;* JESSE HELMS, *U.S. Senate;* FRANK H. MURKOWSKI, *U.S. Senate;* CHARLES S. ROBB, *U.S. Senate;* DANIEL P. MOYNIHAN, *U.S. Senate; and* GORDON J. HUMPHREY, *U.S. Senate.*

START: COMPLETING THE TASK

(by Max M. Kampelman)

WHEN GEORGE BUSH'S administration took office on January 20, 1989, it inherited from Ronald Reagan's administration a U.S.-Soviet joint draft text of a Strategic Arms Reduction Talks (START) treaty limiting and reducing strategic offensive arms. The text reflected that the basic outlines had already been agreed but that its detailed provisions, including on verification and other critical issues, required considerable additional work.

President Bush and his recently assembled team are now conducting a thorough review of where the United States is headed in START and how START relates to its overall security strategy. This article discusses some of the key questions that such a review must address if we are to create a more stable balance at a lower level of intercontinental-range nuclear weapons. It describes briefly the main features of the START treaty as it has been negotiated so far, looks at several concerns that have been expressed regarding START's impact on deterrence, and offers some thoughts on how to proceed with START in the future.

Max M. Kampelman served as head of the U.S. delegation to the Nuclear and Space Talks in Geneva from the opening of these negotiations in 1985 to the date of his resignation on January 20, 1989. He also served as counselor of the Department of State from 1987 to 1989. He has returned to the practice of law.

The Treaty as it Currently Stands

From the outset of the START negotiations in 1982, the U.S. objective has been to promote stability through deep reductions primarily in those strategic capabilities that pose the greatest threat to stability—namely, fast-flying (and consequently short-warning) ballistic missile systems. While seeking deep cuts in those systems most suitable for carrying out a first strike, it has promoted the retention of adequate retaliatory capabilities by proposing more permissive limits on strategic forces that are inherently less destabilizing—namely, slow-flying bombers and cruise missiles. The United States has also placed a high priority on ensuring that any agreement be effectively verifiable.

In the last several years, particularly following the November 1985 Geneva summit, an agreement fully reflecting these U.S. objectives has taken shape. Joint draft texts of the basic treaty and its accompanying protocols on inspection, data exchange, and implementation run to several hundred pages. Embedded in those lengthy and tightly worded legal documents is U.S.-Soviet agreement on the main elements of a START regime.

The U.S. goal of deeply reducing Soviet ballistic missile capabilities is satisfied by several of the draft treaty's central provisions: a ceiling of 4,900 warheads on each side's combined force of intercontinental ballistic mis-

siles and submarine-launched ballistic missiles (ICBMs and SLBMs, compared with the present Soviet total of close to 10,000); a ceiling of 1,540 warheads deployed on no more than 154 heavy ICBMs (half the current Soviet level); and a limit on ballistic missile throw-weight set at approximately 50 percent of the present Soviet level.

At the same time, the draft contains provisions that will enable both sides to maintain adequate retaliatory forces. Thus, within a ceiling of 6,000 accountable warheads deployed on ballistic missiles and bombers, all bombers carrying nuclear-armed, short-range missiles and bombs will count as only a single unit, regardless of how many such weapons are actually on board. It is also agreed that any solution eventually worked out on the question of nuclear-armed, sea-launched cruise missiles (SLCMs) will not involve counting SLCMs in the 6,000 total. Moreover, the agreed ceiling of 1,600 on each side's combined force of ballistic missiles and bombers is set sufficiently high that neither side would be compelled to concentrate its 6,000 accountable warheads on an unduly small number of delivery vehicles, thereby increasing the potential vulnerability of those launchers.

START's deep, 50 percent reductions in ballistic missile capabilities, combined with its more permissive treatment of air-breathing bombers and cruise missiles, will encourage the evolution of force structures that rely less on first-strike systems and more on less destabilizing systems. For example, 90 percent of Soviet strategic weapons currently are deployed on ballistic missiles. Under START, that percentage will drop considerably as ballistic missile warheads are cut in half and bombers' capabilities are permitted to expand.

U.S. and Soviet negotiators have already agreed on the overall framework and many of the details of a START verification regime that builds on but exceeds the intrusive and precedent-setting verification measures adopted in the Intermediate-range Nuclear Forces (INF) Treaty. The START regime would include extensive exchanges of data on treaty-limited systems and facilities; on-site observation of the process of eliminating and converting systems; baseline and short-notice inspections of declared facilities as well as short-notice inspections of additional suspect sites; and continuous on-site monitoring of the portals and perimeters of certain critical production facilities.

The progress recorded in the joint draft treaty text is impressive. It represents breakthroughs reached during intensive negotiations at the summit and ministerial levels as well as many thousands of hours of hard work by delegations of experts in Geneva. Yet, a multitude of issues remain to be resolved. Many of these are relatively minor and technical in nature; but some reflect significant political differences:

Mobile ICBMs. Concerned by the difficulties of verifying the number of mobile ICBMs, the United States proposed to ban them in START but indicated it would reconsider its position if effective verification measures could be worked out. With the Soviets insistent on permitting mobiles, the two sides made progress in 1988 on a possible verification regime for both road-mobile and rail-mobile systems, although not enough progress to enable the United States to drop its proposed ban.

Air-launched cruise missiles (ALCMs). The most important remaining ALCM issue is the question of how many nu-

clear-armed ALCMs to attribute to bombers specially configured to carry them. The Soviets call for assigning to each such bomber the maximum number of ALCMs for which bombers of its type are equipped. The Americans, however, have proposed attributing an agreed number of ALCMs (that is, 10) to all U.S. and Soviet ALCM-carrying bombers of a given type regardless of the number of cruise missiles actually carried on individual bombers.

ICBM warhead sublimit. Because of the special qualifications of ICBMs as first-strike systems, the United States has proposed a sublimit of 3,300 ICBM warheads. While indicating that they would not plan under START to deploy more than 3,300 ICBM warheads, the Soviet Union has argued that any sublimit should apply equally to ICBM and SLBM warheads. The latter would force greater U.S. reductions in less stabilizing directions.

SLCMs. The Soviets have proposed restrictive numerical limits on both nuclear and conventional SLCMs and have suggested highly intrusive means of monitoring those limits, including shipboard inspections. The Americans have ruled out limits on conventional SLCMs. Moreover, we question the value of binding limits on nuclear-armed SLCMs because (since they are identical in appearance to conventionally armed SLCMs) they are exceedingly difficult, if not practically impossible, to verify, are small in number, and do not constitute a serious circumvention threat. Furthermore, they are deployed on general-purpose naval vessels (unlike central strategic systems covered in START). Although agreeing to explore limits on nuclear SLCMs, the United States has not found any verification system that would be both effective and consistent with the navy's operational requirements. It has proposed, as an alternative to binding limits, that both sides exchange information on their nuclear SLCM deployment programs.

START-ABM linkage. Arguing that stability would be jeopardized by deep cuts in strategic offensive forces in the absence of effective constraints on strategic defenses, the Soviet Union has insisted that START be accompanied by an agreement not to withdraw from the Anti-Ballistic Missile (ABM) Treaty for a definite period of time. At the Reykjavík summit, the United States agreed to negotiate such an ABM nonwithdrawal commitment; since then progress has been made in several key areas. Nevertheless, basic differences remain, especially on what limits on ABM testing activities in space would exist during the nonwithdrawal period.

START's Impact on Deterrence

Although the United States and Soviet Union must still overcome these differences as well as countless others of a more technical character, the joint draft text now under review by President Bush and his advisers records that the United States has already achieved much of what it originally set out to do. However, despite this success at the negotiating table, some respected observers have argued that the deep reductions mandated by the emerging START treaty could adversely affect deterrence and stability.

This criticism of START might be divided into three related concerns: START will undermine stability by increasing Soviet incentives to launch a first strike; START will undercut the flexible response strategy of the North Atlantic Treaty Organization (NATO), thus weakening the West's ability to deter a Warsaw Pact conventional at-

tack; and START will have a powerfully negative effect on Western publics' attitudes toward nuclear deterrence, thereby increasing the difficulty of sustaining public support for necessary modernization programs. Each of these concerns is worth addressing.

First-strike incentives. The first concern is that START's deep reductions would concentrate U.S. retaliatory weapons in too few ICBMs and submarines and that the resulting vulnerability of those delivery platforms would increase Soviet incentives to launch a first strike. This concern, however, is based on faulty analysis. It holds START responsible for challenges that will occur even without START; it makes pessimistic assumptions about the forces the United States would choose to deploy under START; and it minimizes the positive effects of START's deep cuts in Soviet missile forces.

Critics have maintained that START reductions will leave U.S. ICBMS more vulnerable to preemption by increasing the ratio of Soviet silo-busting warheads to U.S. silos, that is, that the ratio could shift from 3:1 to more than 4:1. This assumes, however, that under START, the United States would deploy only Minuteman IIIs, with multiple independently targeted reentry vehicles (MIRVs), and MXs in 300–400 silos. Nothing in START, however, would prevent the United States from dispersing its ICBM warheads over many more silos (for example, 700–900) by deploying a large number of single- or double-warhead missiles. Combined with cuts in Soviet warheads, this would mean a decrease in the warhead-to-target ratio.

Dispersing U.S. silo-based warheads in this manner would not make U.S. ICBMs untargetable. The Soviet Union could still threaten the United States' entire post-START, silo-based force by targeting two hard-target-capable warheads against each silo (just as it could threaten all the United States' existing 1,000 silos in the absence of an agreement). This reflects the reality that, with improving missile accuracies, no plausible arms-control agreement could restore the survivability of fixed-based ICBMs. Nonetheless, decreasing the warhead-to-target ratio through dispersal would require the Soviets to commit a larger share of their available warheads to attacking U.S. silos, thereby leaving fewer warheads for other purposes and lowering their incentives to strike first.

START would also make an important contribution to stability by sharply constraining Soviet ability to target mobile or movable ICBMs. With the Soviet threat reduced and predictably bounded, the design of mobile-basing arrangements and the acquisition of more survivable systems become much more practical and affordable.

Critics have also maintained that START will substantially reduce the number of U.S. ballistic missile submarines (SSBNs), leaving them vulnerable to Soviet antisubmarine warfare (ASW) capabilities. It is true that the number of U.S. SSBNs will decline from about 35 in 1989 to about 20 in the late 1990s. This results not from START but from the decision years ago to replace a larger number of 16-missile boats with considerably fewer but quieter (thus less detectable) 24-missile Tridents.

The critics state that START will limit the United States to about 18 SSBNs. This assumes that each Trident would be loaded to its full capacity of 192 warheads. Nothing in START would require that, however.

If the United States became concerned about having only 18 boats, it would have the right to distribute its chosen allotment of SLBM warheads over a larger number of submarines (for example, by deploying fewer missiles per boat or fewer warheads per missile, or both).

The decision of whether to increase the number of SSBNs would depend on U.S. assessment of Soviet antisubmarine weapon capabilities. Experts currently consider U.S. Tridents to be virtually invulnerable at sea. As long as the Soviets are unable to detect and track U.S. SSBNs, it is difficult to argue that, to ensure survivability, the United States must spend additional money to spread its SLBM warheads over a larger number of boats. But we have that option.

A number of critics have argued that START will compel the United States to undertake expensive modernization programs to compensate for START's allegedly adverse effect on the survivability of its forces. The reality is that continued modernization would be just as necessary without an agreement as with one. With or without START, U.S. silo-based ICBMs will be targetable (regardless of the number of silos or the precise warhead-to-target ratio). Either way, it would be highly desirable to adopt mobile basing to enhance survivability. With or without START, the United States will have fewer SSBNs than at present, and it must continue to give high priority to thwarting Soviet ASW capabilities. If in the future the survivability of the Trident force becomes questionable, the United States will have the option of moving to a larger number of submarines or pursuing some other remedy.

There is a crucial difference between undertaking survivability programs with START and without it. Under START, the Soviet threat to U.S. forces will be less than half as large. With the threat thus limited, those programs can be pursued more predictably, affordably, and effectively. Without START, the threat would be more than twice as great and unbounded, and the task of ensuring survivability would be correspondingly more difficult and costly.

START would, therefore, put the United States in a stronger position to maintain the survivability of its deterrent than it would be in without an agreement. START would reduce—not increase, as the critics assert—Soviet incentives to launch a first strike.

NATO strategy. A second concern raised by the critics is that START could undermine NATO's ability to deter Warsaw Pact aggression, particularly a massive conventional attack. This concern, however, distorts the impact of START's reductions on the credibility of the West's strategic deterrent forces, and it ignores the contribution of factors other than U.S. strategic forces (for example, theater nuclear forces, conventional capabilities, alliance cohesion and resolve) to the credibility and effectiveness of flexible response.

NATO's flexible response strategy is designed to prevent war by maintaining a full spectrum of military forces capable of responding flexibly and effectively to any form of aggression. This requires a triad of conventional, theater nuclear, and strategic nuclear forces. The three legs of the triad work together to prevent the Warsaw Pact from predicting the response and the risks it would face in attacking NATO. They thus deny the pact any confidence that it could achieve its goals at an acceptable price. U.S. strategic forces play a crit-

ical role in this strategy. The Warsaw Pact, particularly the Soviet leadership, must understand that an attack against NATO is an attack against the United States and ultimately risks provoking the use of U.S. strategic forces against the Soviet Union.

Neither the reductions in U.S. strategic forces required by START nor other provisions of the treaty relevant to NATO security interests will adversely affect Western capabilities for flexible response. After reductions, the United States would retain a large number of diverse, highly capable, and operationally flexible strategic systems that would hold at risk a full range of targets of high value to the Soviet Union, including military, political leadership, and economic assets. As indicated above, START would put the United States in an advantageous position to ensure the continued survivability of those forces. Furthermore, no constraints in START would hinder current U.S. strategic modernization programs or prevent the United States from pursuing modernization programs in the future that would reinforce the deterrent qualities of its forces.

START's provisions will not have a negative impact on U.S. theater nuclear capabilities. U.S. negotiators successfully fought off Soviet efforts to include U.S. European-based, intermediate-range aircraft (forward-based systems as the Soviets call them) in the treaty, and additional U.S. dual-capable aircraft can be deployed in Europe in the future. START's limits on ALCMs will not cover the nuclear standoff missile that NATO is currently interested in deploying on theater-based aircraft. Moreover, the United States will have sufficient strategic forces under START to continue committing a portion of them (currently a substantial number of SLBM warheads) to NATO's supreme commander. Nothing in START as it presently stands would preclude the possibility, which is now under consideration by NATO, of making U.S. SLCMs available for alliance use.

START will not constrain the nuclear capabilities of other NATO nuclear powers, which contribute significantly to deterrence in Europe. British and French forces will neither be counted nor compensated for in the treaty's limits. In addition, the United States will not accept anything in the treaty that would indirectly affect allied capabilities by interfering with traditional programs of cooperation (for example, British acquisition of the Trident D–5 missile).

Nor will the United States allow START to be used to limit NATO's conventional capabilities and options. For example, the Americans have already reached agreement with the Soviets that START will not limit conventionally armed ALCMs of any range.

START's reductions will also advance NATO security interests by denying the Soviets easy means of circumventing the INF treaty. Without START, the Soviets could simply acquire additional strategic missiles and assign some of them to European targets previously covered by the SS–20s that must be eliminated under the INF treaty. START's deep cuts will force the Soviets to make hard tradeoffs between their strategic and theater targeting requirements, and may, therefore, reduce the short-warning threat to key NATO facilities.

Of course, START will not restore conditions of U.S. massive strategic superiority and territorial invulnerability that supported extended deterrence by enhancing the credibility of the option to use nuclear weapons in

response to Warsaw Pact aggression. No arms-control agreement could conceivably re-create such conditions; nor is it feasible to attain them in the absence of an agreement.

The continued value of flexible response, however, does not depend on a restoration of clear-cut U.S. superiority and invulnerability. It depends instead on the perception by the Soviet leadership that any attack on NATO will engage the vital interests of the United States and will, therefore, entail substantial risks of escalating to the use of nuclear weapons, ultimately including U.S. strategic forces. That perception depends less on the precise numerical levels or qualitative characteristics of U.S. strategic forces than it does on factors that influence how strongly and reliably the U.S. strategic deterrent is coupled to the defense of NATO—factors such as the capabilities of NATO's theater nuclear forces, the large-scale commitment of U.S. ground forces to Europe, and the political cohesion and strategic unity of the alliance.

U.S. strategic forces will remain the bedrock on which NATO's deterrence strategy ultimately must be based. Preserving flexible response means maintaining credible and effective strategic capabilities. It also means ensuring that the U.S. theater nuclear force is up-to-date and adjusted to post-INF conditions, that U.S. troops remain stationed in Europe both as a direct means of defense and as a demonstration of U.S. commitment, and that alliance solidarity remains one of the United States' highest priorities. START will not undermine any of these tasks. Indeed, completion of START, which all U.S. allies strongly support, would not only preserve strong alliance deterrence capabilities, but also it would help contribute to alliance harmony and cohesion.

Public support for nuclear deterrence. A third concern among the critics is that, whatever direct impact START may have on crisis stability and flexible response, it will weaken deterrence in the long run through its indirect effects on public attitudes toward nuclear weapons. According to this view, the public euphoria surrounding the achievement of historic 50 percent reductions—combined with existing antinuclear sentiment within Western publics and the widespread tendency in the West to believe that the Soviet Union under Mikhail Gorbachev already presents a sharply reduced military threat—will further stigmatize nuclear weapons and delegitimize nuclear deterrence. This, in turn, will make it increasingly difficult over time to sustain adequate public support for strategic and theater modernization programs, the stationing of nuclear weapons on foreign territory, port calls by naval vessels possibly carrying nuclear weapons, and other activities necessary to the maintenance of the West's nuclear deterrence strategy.

There is no denying that, in light of budgetary pressures, Gorbachev's skillful initiatives, and Western proclivities toward wishful thinking, allied governments will be hard pressed in coming years to generate public support for adequate defense spending, especially on nuclear weapons programs. Nevertheless, completion of a START treaty need not compound this problem and could even be utilized to alleviate it to some degree.

The historical record suggests that arms-control agreements do not necessarily undercut domestic support for weapons programs permitted by the agreements. Both SALT I's Interim Agreement and SALT II were accompanied by congressional support for major strategic offensive arms programs. Indeed, arms-control agree-

ments and strategic programs can be mutually reinforcing politically, as proponents gain support for one by agreeing to support the other.

Of course, previous examples of public willingness to support both arms control and modernization do not necessarily provide a reliable indication of public attitudes in the case of an agreement reducing strategic arms by the unprecedented magnitude of 50 percent. However, the public's reaction to START, and consequently START's long-term implications for nuclear deterrence, will depend to a significant extent on how the U.S. administration chooses to portray the agreement.

In its public statements about START both before and after completion of the treaty, the United States should emphasize that the goal of START is not—as the Soviet Union will no doubt argue—to reduce reliance on nuclear deterrence and move toward the complete elimination of nuclear weapons at an early date. The United States should point out that START is intended not to abolish nuclear deterrence but to reinforce and stabilize it and make it work effectively at lower, safer levels. The United States should clarify that, at least for the foreseeable future, the West has no choice but to continue relying on nuclear deterrence as the ultimate guarantor of Western security.

The treaty will indeed be a historic political and diplomatic success—because for the first time the world's two main adversaries have managed to agree on reducing weapons of central importance to them. What U.S. leadership must emphasize, however, is that the strategic importance of the treaty should be kept in perspective and should not be overstated. The treaty, after all, will not alter the basic nuclear strategies of either side, will not decisively reduce the destructiveness of nuclear war should it occur, and will not obviate the need for continued modernization in order to ensure survivable forces. What it will do is moderate the strategic competition and make it more predictable, encourage the evolution of less destabilizing force structures, and facilitate the unilateral acquisition of more survivable forces by constraining both sides' most threatening attack capabilities. These are valuable accomplishments, even if they do not lend themselves to sound bites as readily as historic 50 percent cuts.

In this connection, the United States should be clear publicly about what the term "50 percent reductions" really means. It is simply a shorthand way of expressing what the central objective of START has been from the beginning—50 percent cuts in the most destabilizing ballistic missile capabilities. Through its limits on heavy ICBMs and on ballistic missile warheads and throw-weight, the treaty will indeed achieve precisely that. However, because of counting rules that treat bomber and cruise missile capabilities less restrictively, reductions in total strategic weapons will fall short of 50 percent. There is no reason for the administration to be defensive about this. Genuine 50 percent cuts in ballistic missile capabilities, combined with smaller reductions in air-breathing forces, will encourage more stabilizing force structures. Making this point publicly will demonstrate that the U.S. objective has not been reductions per se, but rather stabilizing reductions, reductions structured carefully so as to minimize first-strike incentives.

Presenting START along the lines suggested here will not, of course, eliminate pressures for reduced de-

fense spending or counteract the tendency of publics to perceive a reduced Soviet military threat even before tangible evidence of a lower threat has materialized. Nevertheless, it could be used to provide Western publics with more realistic expectations about the treaty, thereby avoiding some of the disillusionment that has followed earlier agreements. It may help counteract pressures for prematurely and unwisely abandoning nuclear deterrence. It may also explain why modernization programs cannot be abandoned but must be pursued in conjunction with arms control in order to promote security and stability. Treating START as a step that is politically historic but strategically modest would have the additional advantage of being true.

Proceeding to Complete START

Concerns addressed above about the implications of START for stability and deterrence are legitimate and important, and the Bush national security team must deal with them as it conducts its review of START and overall U.S. security strategy. In the course of the review, the new team probably will conclude that the Reagan administration's basic approach to START was sound and it should build on that approach. If it comes to that conclusion, several important questions will then have to be addressed.

Should the United States seek changes in the U.S.-Soviet framework agreed so far? Among the agreed elements that some observers have suggested be reopened are the ceiling of 1,600 delivery vehicles (which limits the extent to which allowed weapons can be dispersed on delivery vehicles) and the ceiling of 1,540 warheads on 154 heavy ICBMs (which will reduce by half but allow the Soviets to retain their most capable hard-target killer). This is a most doubtful approach.

To try to raise the 1,600 ceiling or eliminate it altogether in order to encourage more highly dispersed forces ignores the fact that the United States is already hard-pressed to reach the 1,600 ceiling. The Soviets would be more likely to take advantage of the additional headroom. Moreover, compared with forces in 1989, the 1,600 ceiling is already a significant step in the right direction and will encourage fewer warheads per missile.

Replacing the agreed ceiling on heavy ICBMs with a ban would, of course, eliminate the most potent Soviet first-strike threat that exists today. However, the benefits would be short-lived. As the Soviets' accuracies improve, all their ICBMs and eventually all their SLBMs as well can be expected to become hard-target killers. Moreover, throughout the negotiations, the Soviets have strongly resisted the elimination of their SS–18 force. It is not in the U.S. interest to reopen the issue now and pay a price to the Soviets for such a change.

Should the United States alter some of its positions on issues not yet resolved with the Soviets? This will present the Bush administration with the opportunity to place its own mark on the treaty. It will and should do so in some cases, while reaffirming previous negotiating positions in others.

ABM-START linkage. The two sides are now at a standoff on space-based testing activities that would be permitted during an ABM treaty nonwithdrawal period. The Soviets are content to settle for an ambiguous solution, apparently hoping to exploit that ambiguity later by arguing that future U.S. testing activities are inconsistent with agreed constraints. The Reagan administration insisted on an explicit solution that clarifies that

planned U.S. SDI activities would be permitted. There is considerable merit in the two sides, at some point and after extensive study, reaching a clear understanding of what ABM testing activities would be permitted. Reaching such agreement could be very time-consuming. One reasonable and feasible solution is to delink START from an ABM nonwithdrawal commitment. The two sides would proceed to finalize START and bring it into force while committing themselves to continue negotiations on a separate agreement on ABM nonwithdrawal, including agreement on permitted testing activities, and on how to cooperate with confidence-building measures as both countries continue to face the impact of new technologies on strategic stability.

SLCMs. No solution to the thorny SLCM issue currently is in sight. If one were discovered soon (involving elaborate means of verifying the number of nuclear-armed SLCMs), it could take a long time to negotiate. Although the United States should continue to pursue in good faith its Washington summit goal of numerical limits outside the 1,600 and 6,000 ceilings, it might make sense initially to handle SLCMs in a manner similar to the approach suggested above for ABM-START linkage. The two sides would undertake a commitment in the START treaty to continue negotiations on effectively verifiable limits on nuclear-armed SLCMs. After entry into force of START and pending the negotiation of binding limits on SLCMs, the two sides would adopt the U.S.-proposed approach of making periodic declarations about their nuclear-SLCM deployment programs.

Mobile ICBMs. With mobile ICBMs clearly a desirable means of promoting ICBM survivability and two different mobile-basing schemes under active consideration in the U.S. government, the U.S. proposal to ban mobiles in START has become increasingly untenable. It is urgent that the president and congressional leadership forge a domestic consensus on mobile basing of U.S. ICBMs. This will permit the United States to move with greater confidence toward establishing a treaty limit on mobile ICBM warheads with special verification measures to be agreed for monitoring mobiles in START.

Verification. The lion's share of the drafting work remaining on START involves a multitude of verification measures. On many of these, the United States should stick to its position. On others, it will need to alter its approach over time. Its objective must be an effectively verifiable treaty. This will require rigorous and sometimes highly intrusive measures. The United States must recognize that not all intrusive measures can be acceptable to itself (if they would give the Soviet Union access to highly sensitive U.S. facilities and information or would unduly constrain U.S. flexibility to structure U.S. forces or operate them efficiently). No arms-control agreement, therefore, can be perfectly verifiable. Trade-offs will have to be made between verification and other important U.S. objectives. The key test will be whether particular trade-offs are justified and whether the resulting verification regime will protect U.S. security by ensuring timely detection of any militarily significant violations.

Should completion of START be linked to progress in the newly created negotiations on conventional arms? A number of observers have suggested such linkage in recent months. It would have considerable merit if concluding a

START treaty independently would weaken the U.S. deterrent against Soviet conventional attack or if the Soviets needed a START treaty so badly that, to secure it, they would accept a conventional arms deal they would not otherwise accept. As indicated above, however, the reductions contemplated by START will not undermine flexible response and leave the West less well off against possible Warsaw Pact aggression. Although the Soviets would like to conclude START, there is little evidence that they need a treaty so much that they would make concessions in the area of conventional arms that they would otherwise not be inclined to make in order to get one. Moreover, a completed agreement on conventional arms will probably take quite some time, and artificially linking it to START would delay a treaty serving U.S. security interests. A START treaty and an agreement on conventional arms should each be pursued at its own pace and not linked to one another.

Should START be linked to U.S. strategic modernization programs? As noted above, START will not compel the United States to pursue strategic modernization programs that it could otherwise avoid simply to compensate for START's allegedly adverse effects on stability. Nonetheless, several programs would work together with START limits to strengthen stability, and those should be pursued along with an agreement. This does not mean that the administration should delay the resumption of the negotiations until it has secured full congressional support and funding for its strategic programs, including plans for more survivable basing of U.S. ICBMs. It can afford to pursue both in tandem, developing and building support for its programs while continuing to negotiate in Geneva. Nevertheless, as a practical political matter, it will be difficult to ratify a START treaty in the absence of a politically and technically workable post-START strategic plan. Still, with completion of START perhaps a year away, there should be plenty of time to gain the necessary consensus for the administration's programs.

Completing the Task

If arms control is to be an effective tool of national security policy, the United States must not rely on it too much or too little. Relying on it too much—by assuming it can take the place of critical defense programs—can weaken U.S. deterrence capabilities and even lead to disillusionment with arms control. Relying on it too little—by failing to pursue promising negotiating opportunities—can forfeit its potentially significant contribution to U.S. security and even lead to an unraveling of support for needed weapons modernization.

The approach to START inherited by the Bush administration from the Reagan administration steers a sound middle course between relying either too much or too little on arms control. That approach does not view START as a panacea for solving U.S. strategic problems. Rather, it recognizes that START can strengthen stability by complementing and facilitating—not by taking the place of—U.S. defense programs, especially modernization programs aimed at ensuring survivable deterrent capabilities. At the same time, that approach does not dismiss START simply because it is incapable of single-handedly solving U.S. strategic problems. Instead, it recognizes the valuable contribution that START, working together with the

United States' own modernization programs, can make to resolving those problems and promoting U.S. security.

The Bush administration will no doubt wish to shape the substantive outcome of the negotiations as it sees fit. It will also wish to proceed carefully, ensuring that the details of the agreement, especially on verification, are right. Completing the task—working as expeditiously as rigorous negotiating standards will allow and building on the promising foundation set in place by president Reagan and his advisers—will serve the interests of the United States and its allies as well as the goal of promoting a safer, more stable world.

Acknowledgment: This article reflects the views of Dr. Kampelman. No agency of the U.S. government is responsible for any views expressed herein.